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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Bros. Company.
(INCORPORATED.)

Vol. II.

CHICAGO, ILLINOIS, MAY 15, 1884.

No. 11.

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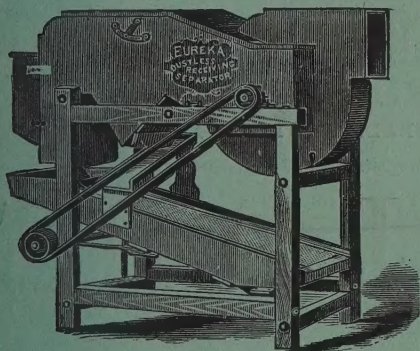
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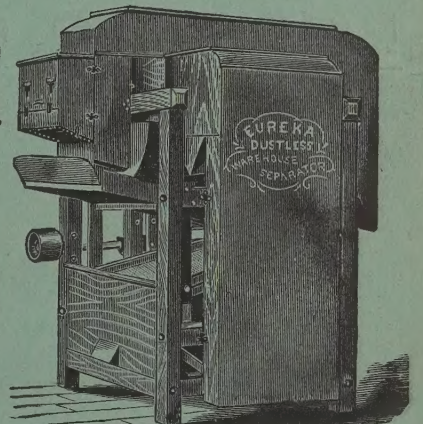
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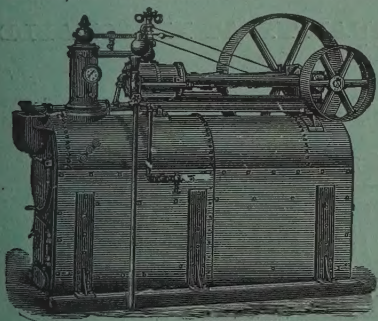
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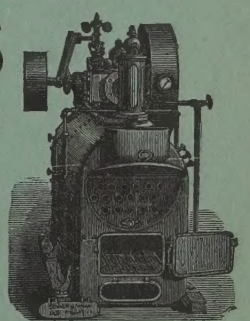
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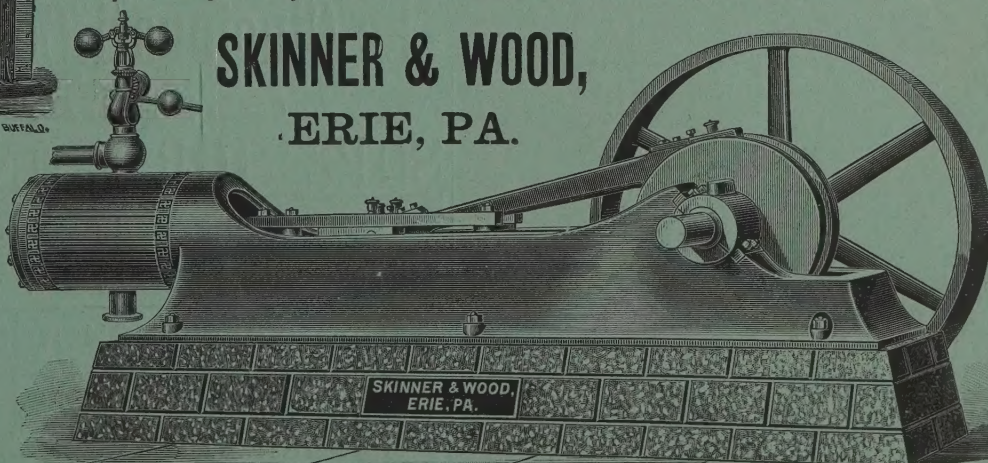
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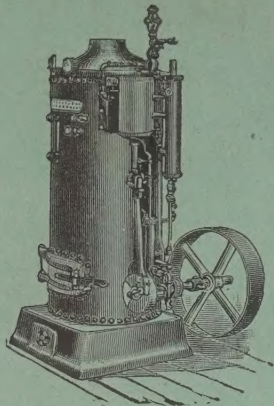
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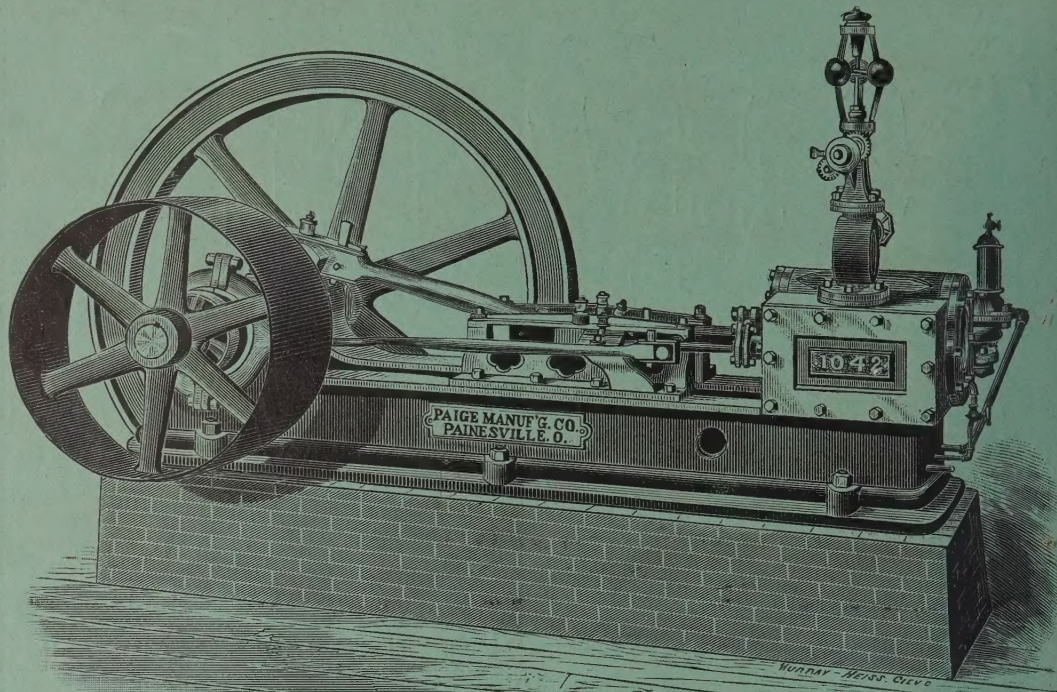
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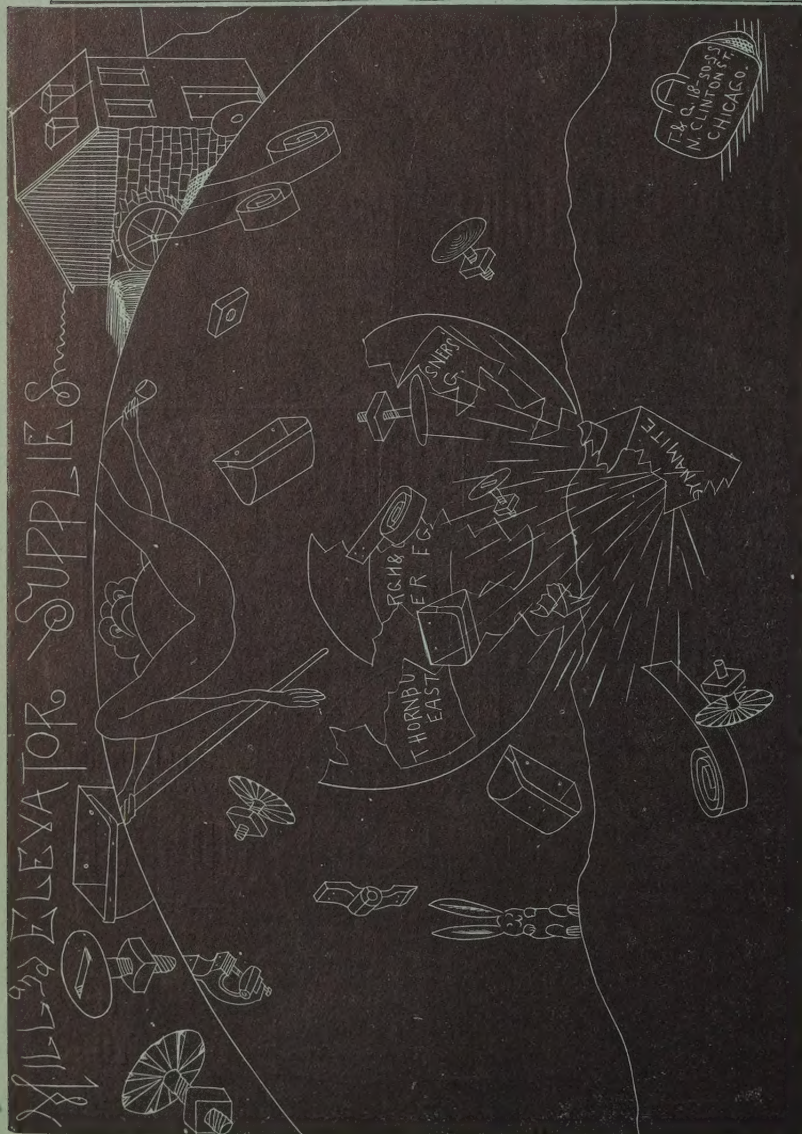


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THE NEW PRODUCE EXCHANGE BUILDING, NEW YORK.

The formal opening of the New York Produce Exchange Building, occurred on May 6, with ceremonies and attendance commensurate with the magnificence of

tations during the intervening years. The Building committee, comprising some of the older and most experienced members, were: Ex-President Franklin Edson, Chairman; Alex. E. Orr, Secretary; H. O. Armour, S. D. Harrison, A. M. Hoyt, E. R. Livermore, Wm. I. Pool and L. J. N. Stark. To secure the

statue of George III., which was destroyed during the Revolution. Beyond the park, on Battery Place, stands the old Washington Hotel, crowded with the reminiscences of the Revolution. This is soon to give way to a magnificent structure, eleven stories in height, built under architectural designs of the same type as the



THE NEW BUILDING OF THE NEW YORK PRODUCE EXCHANGE.

this structure, which stands unrivaled among all the temples of commerce erected in the great marts of either the old or new world. The building that has just been vacated, after eleven years' rental was purchased in 1872, and then seemed ample for all the purposes of the Exchange. But the rapid increase of membership and business soon pointed to the necessity of larger accommodations, and the choice of the present site and plans is the result of many careful examinations and consul-

present site required twenty-four titles, from fifty different persons and estates, and legislative aid for necessary street extension, etc.

The location is at the foot of Broadway, the great artery of New York's business circulation, which, with its continuation, Whitehall street and Beaver; Stone streets, and a continuation of New street, form its boundaries. Opposite is Bowling Green, pregnant with the memories of Colonial days, on which formerly stood the

Exchange, and covering the old headquarters of Gen. Washington, and later of the British generals. But on all sides and in all directions are localities crowded with the associations of our country's early history.

In obtaining plans, the committee offered a bounty for designs of \$500 each to ten architects; seven others were gratuitously offered. Of these four were selected, from which by ballot of the whole Exchange, the names of designers being unknown, the plan was selected

bearing the motto "*In Me Mea Spes Omnis*,"—In me are all my hopes"—made by George B. Post, a young man about forty years of age and a graduate, as civil engineer, of the University of New York. The architecture of this building, which is illustrated on this page is a modified *Renaissance*. This term applies to the style adopted in Italy in the early part of the fourteenth century, whose archetype is the far famed Duomo, a cathedral of Florence. The first pile was driven on July 17, 1881, and the last on Dec. 24 of the same year, and the corner stone was laid with imposing ceremonies on June 6, 1882.

The dimensions of the building on the ground are: On Broadway and Whitehall street, 307½ feet; on Beaver street, 150¼; on Stone street, 159 feet and 300 feet on New street; with a clock tower at the eastern end of the Stone street facade. The average height of the facades is 125 feet above the curb, and that of the clock tower, which is 48 feet square, and has the general form of the Italian *Campanile*, is 200 feet, or 306 feet to top of flag pole. The clock, the largest in the city, is 12 feet in diameter, the hands 6 feet, and dial figures 20 inches in length. The material used for these and the cellar walls, base course, porches, and the terrace north of the tower extending to Marketfield street, is granite. Above the base course, except the porches, the entire design is in red terra cotta and red Philadelphia brick. The girth of this immense structure, outside the walls, is nearly one-fifth of a mile, and the aggregate floor surface is 7½ acres and 2,521 square feet. On the 16,000 piles and massive stone foundation rest, a weight of 50,000 tons. In the general selection of material and construction, durability and fire-proof qualities have been specially considered, while due ornamentation has also been accomplished.

The Exchange room is 230x145 feet, 60 feet high in the center, and at the ceilings 47½ feet. It is lighted by a sky-light 75 feet above the floor, 180x44 feet, and by twenty-three windows, each 31 feet high. The north end of the Exchange floor is divided into two stories, for the executive officers, rooms for library, coat rooms, etc. The large room is admirably adapted to the business to be transacted in it, with no useful facilities omitted. The entrances to the building are by three main porches on Broadway, Beaver and Stone streets. The one that will be most largely used by members is through New and Marketfield streets and the terrace to the eastern door of building. The exchange room and upper stories are reached by one grand stairway and five Otis elevators at the north end; and a second grand staircase and four elevators in the tower at the southeast corner. One of the elevators will run to the roof of the tower.

In the basement of the Exchange are the Safe Deposit Co. vaults, organized under the auspices of leading members of the Association which will be of great convenience to the membership. On the ground floor the large rooms are principally occupied by members of the Exchange, and are connected with each part of the building by multiphone speaking tubes. Five elevators will be in constant motion. Every precaution has been taken as to the sanitary conditions in ventilation, heating, etc. The flagpole on the tower is 115 feet long and 90 feet clear of the cupola. The flag, a marvel of beauty and richness, is 100x50 inches, and with one exception is the largest American flag in this country. The clock can be distinctly seen from the Brooklyn bridge. The total cost of the building is placed at \$3,000,000, one-third of which was the cost of site and pile foundations.

The old building, just vacated, was first occupied in 1861, the opening year of our civil war, and at the close of the first fiscal year in 1862, had a membership of 1,238; the present membership is 3,000, and a seat is valued at \$4,100. The officers are J. H. Herrick, President; D. A. Lindley, Vice-President; Thos. A. McIntyre, Secretary; Samuel Jacoby, Treasurer, and Wm. E. Fletcher, Superintendent. There are besides a board of managers consisting of twelve members; an assistant superintendent, counsel, acting chemist and a firm of analytical and consulting chemists. Says the *Produce Exchange Reporter*: "Under the broad dome of this mammoth structure will be gathered the products of every portion of the United States. * * * In this one building, with the aid of the cable, telegraph, and telephone, the principal commercial emporiums of the two continents will be brought into instantaneous commercial intercourse."

The U. S. Government is using large numbers of the Howe Scales. Borden, Selleck & Co., agents, Chicago, Ill.

Legal Notes.

Corner in Grain.

A loan for the purpose of making a "corner" in wheat can not be recovered.—*Raymond vs. Leavitt, Michigan Supreme Court.*

Indorsement—Restricted One to Agent.

An indorsement, "Pay B or order, for account of C," is a restricted indorsement, vests no general property in B, but simply constitutes him the agent of C for the purpose of collection.—*Bank vs. Bank, Kansas Supreme Court.*

Broker's Liability to Employer.

A broker is bound to possess and to exercise proper knowledge and skill, and to act with the utmost good faith. If he makes an unauthorized transfer of the property, he is liable for a conversion. But when he, being authorized to sell at a given price, sells at a lower price, he is liable for misconduct, but not for a conversion, and when the broker makes an unauthorized purchase the principal may repudiate the contract and sue to recover the money advanced to make the purchase.

Contract and Lease.

The promise or obligation of a lessee to pay rent is a sufficient consideration for an agreement to lease the premises to him. Where a party agrees to lease property to another for a stipulated annual rent, the insolvency of the latter is no reason for not decreeing a specific performance of the agreement, when he has offered abundant security for the payment of the rent, which is refused because the owner thinks he can do better, and, therefore, determines not to perform.—*McFarlane vs. Williams, Supreme Court of Illinois.*

Mistake in Insurance Policy.

The owners of a warehouse being indebted to the plaintiff, agreed to insure same against fire for his benefit, and accordingly agreed with the defendant for such insurance, in their names, with loss payable to the plaintiff. But by mistake the plaintiff's name was written in the policy as the assured and the owner of the property. A loss occurred within the period of the risk, and after proof of loss by the owners, and adjustment by the defendant, the former assigned the policy and their rights thereunder to the plaintiff. Held that the equity of the case was with the plaintiff and that he was entitled to have the contract reformed, according to the true understanding and purpose of the parties thereto.—*Spare vs. Home Mut. Ins. Co., U. S. Circuit Court, District of Oregon.*

Habitual Non-Observance of Exchange Rules.

Where merchants form voluntary associations "to establish just and equitable principles, uniform usages, rules and regulations, which shall govern all transactions" between the members, parties dealing with each other, who are members, make the rules and regulations a part of their contract, and the courts will enforce them as such, but this only when they are observed by the members involved in the controversy, for the habitual non-observance by them in their dealings with each other will abrogate the particular rule violated, and relegate the contract to the ordinary rules of law governing it.—*Dillard vs. Paton, United States Circuit Court, Western District Tennessee.*

WHEAT STILL ON DECK.

A writer in an agricultural journal, in reply to the great alarm expressed by a correspondent, asserts that "wheat has not gone to the dogs," and looks upon the fears expressed as to the ruinous effects upon American production by the competition of India and Australia, as unwarranted. The writer speaks of the greater injuries inflicted upon our wheat markets and production by grain speculators, and refers with some exultation to the recent reputed heavy losses of Keene that have, it is said, about cleaned out his ill-gotten millions, in the late deal of a huge grain pool. But that wheat is not going out of profitable production in this country is shown by the superior qualities of our grain and the naturally superior adaptation of our soil and climate to this cereal with the capital and energy to continually improve and cheapen the cost of transportation, which is one of the most important factors in its value in the world's markets. Our present wheat valuations are low, due to the multitudinous currents and ebbs and flows in the great

tides of commerce. But these have always occurred, with their subsequent reaction; while it remains true that nature never supplies a large surplus of the necessities of life to be wasted.

Of India, the present special bugbear of our producers, it is noted that her great rice product is subject to failures, and that famines are there of frequent occurrence; so that her increased transportation and wheat-producing facilities will probably be required to offset these evils and supply her own increasing food demands. One famine year, it is said, will more than consume the surplus of three years' production. In our own country the increase of population and home consumption is making gigantic strides, while our wheat-growing area has limits practically, greatly affected by relatively decreasing yields and soil exhaustion. The diversity of channels into which the productive and manufacturing energies of this nation can be turned is immense and rapidly increasing, and they are liable to be hastily entered by the multitudes with short-sighted calculation. Those who are far-seeing and wiser may follow the old path of cereal production where all circumstances favor, and have no fear as to final favorable results.

Communicated.

HORSE POWERS FOR ELEVATORS.

Editor American Elevator and Grain Trade:—My experience with animal power for grain elevators is that two or more horses, intelligently attached with equalizer to sweeps, furnishes a motion as steady and positive as can be expected. I have successfully used this method for several years for elevating and cleaning the several kinds of grain and seeds. I have never tested a tread-power and have no faith in it.

Yours truly,
Franklin Grove, Ill.

GEO. H. TAYLOR,

THE STEAM-SHOVEL PATENT.

A minority report of the House Committee on Patents in regard to the extension of the patent on the steam grain shovel, which is the last of three reports presented, is adverse to the extension, the others having been in its favor. This combination, whose patent of seventeen years expired in 1882, consists of shovels and scoops with ropes and pulleys to be worked in the holds of vessels by steam power, the hands employed simply guiding the shovels. The above report, presented by Senators Mitchell and Camden, late in April, says: The policy of the government has been opposed to granting patents for longer periods than seventeen years. The steam-shovel patentees have already received royalties amounting to \$200,000, while incurring no risks, and should be satisfied without asking an extension. The report sets forth that petitions have come from elevator companies and ship-owners at all the great shipping centers on the great lakes and from the Eastern states, asking that the patent be not renewed on these grounds. The original owners have parted with it, simply because of receiving no more than the sum stated, and not from poverty. The public has already paid enough for its use, and the renewal of the patent would impose an unjust burden upon the grain trade and producers. The patent expired two years ago, and its reissue would be equivalent to an illegal issue of a new patent. In the present depressed condition of the grain trade and wheat production, a sharp lookout in this matter should be kept on congressional jobbery, under the management of a moneyed monopoly, to the immense injury of the most important industry in our country, with the most extensive connections with the public welfare.

The young man who allows himself to be led into speculating (or, more properly, gambling) at these bucket-shops, is almost certain to destroy his usefulness and his manhood. The fever of excitement under which he constantly labors unfits him for any real work, and he soon becomes a loafer—a hanger-on of saloons near to his place of gambling. If he should make a small winning, he at once dreams of becoming a Gould, or a Fraley that was, and dips into the bucket deeper than ever, only to lose what he had recently won. And thus the game goes on, until, in character and worth to society, the young man is not of as much account as a poodle dog. The latter may serve some good as a plaything for children, but a seedy young gambler has no place in the great economy of nature.—*St. Louis Grocer.*

ABOUT CORN.

Corn, *Zea Mays*, which is always called maize in Europe where the term corn covers all the cereals, may be regarded in the commercial empire as the premier of the commons, while wheat, with its special bread-making qualities, holds the regal sway. The power and domain of the former is far the most extensive, as well as its value to the great industrial world. Corn is naturally a tropical plant. Its modern history dates with the discovery of America, from whence Columbus brought samples; but it is now known to have been cultivated from time immemorial in Central Africa. While there seems to be proof in pictures and manuscripts of its existence in Ancient Greece, China, and other ancient nations who had lost its knowledge as they had of many other valuable products and arts.

Corn is now grown in Portugal, part of France, Italy, Greece, Persia, Northern India, Egypt, Nubia, Barbary and the Canary Isles. It is the leading cereal of South America, between the altitudes 3,000 and 6,000 feet, and has been found at an altitude of 7,200 feet above the sea level. But its adaptability to different climates is wonderful, and its cultivation now extends far beyond the tropics. It is one of the most productive of the cereals, yielding under favoring conditions 800 fold, while it is one of the least exhausting of crops. Its adaptability to climates is seen in the fact that while in the tropics it requires five months to mature, there are varieties that will ripen in six weeks in the brief hot, northern summer. In selecting seed the habits of the grain for some period should be understood. Grain from the warm, southern regions does not do as well for seed in the northern states as that grown in more northern latitudes, as the experience of our Western farmers has taught them sometimes at a heavy cost.

The peculiar botanical history and structure of this grand evolution from the grasses are very fully given by a scientific correspondent of the *Prairie Farmer*, with much valuable practical information. Experiments made to test the comparative productiveness of seed taken from different parts of the ear show that seed from the tips produce the largest amount of sound corn, and that from the middle, the least. The largest possible yield of sound corn may be expected, says this writer, from uniform development, that is, when all the stalks grow to the same size, and bloom at the same time, and with the greatest number of stalks that can be grown on a given area without crowding, so as to dwarf the growth. Its multitudinous slender rootlets that are put forth at the time of flowering near the surface of the ground require full weedless possession of the soil for a perfect yield.

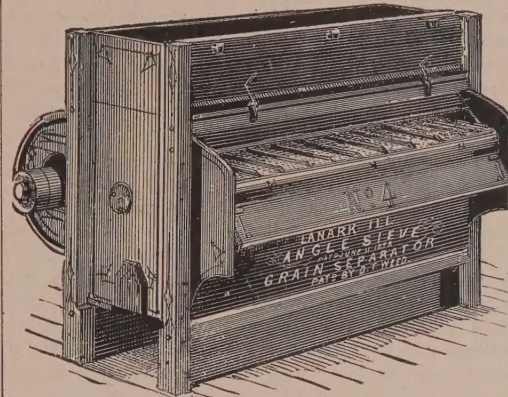
The uses of corn are innumerable. Besides those well known in their large varieties for bread and food material, the pith abounds in sweet juice that can be made into syrup or sugar. In South America a beer called *Chica* is made from corn, and its use for the production of alcohol is very extensive, as well as the immense manufacture from its starch of glucose, which in its forms of syrup, sugar, etc., are coextensive with the product of the sugar-cane. Oil is made from the kernel, and in the days of the old lard oil light was burned in lamps. The leaves are used for fodder, the stalks for roof thatch and for baskets, and the cobs for fuel, while the culm or pith is said to make durable yarn. Mattresses are largely used made of corn husks, while reduced to pulp paper of various and valuable qualities is made from it. Assuredly this grand commoner, who offers good and abundantly nutritious food to man and beast; sweetens man's coffee and tea, and makes vinegar for his pickles, thatches his roof, darns his stockings, oils his boots, and if he be so inclined pours beer or whiskey down his throat with all their much desired results, whether good or evil, holds a vast domain under his sway, and is worthy of the respectful regard of the great world of trade.

Mr. Wm. J. Phillips, grain and flour merchant, and member of the New York Produce Exchange, was announced as having failed on April 25. He did not make his appearance on the following day, and it was rumored that he had been negotiating forged paper and had absconded, which was confirmed by subsequent developments, based on affidavits. Mr. R. H. Laimber, a special partner, stated that he had put \$20,000 into the firm and expected to lose that amount and a good deal more. He did not know where Phillips was; there was no doubt that he had obtained money on forged warehouse re-

ceipts. Several banks and members of the Exchange had advanced money on these receipts. Judge Donahue, of the Supreme Court, granted, on application, attachments to McIntyre & Wardell, and Irving P. Bennett, against whatever property of Phillips' could be found. Mr. Phillips was about 49 years of age, has been a member of the Exchange since its organization, and was at one time its secretary. He was reported to have left the city for parts unknown on April 24.

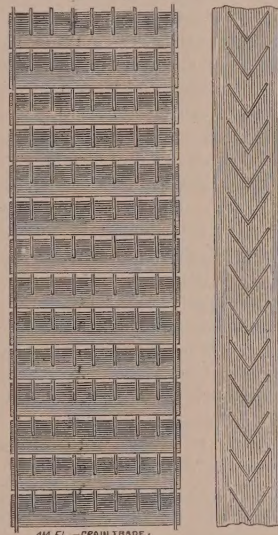
THE ANGLE SIEVE GRAIN SEPARATOR.

Grain dealers, farmers, and millers are all alike interested in every device which will remove impurities from grain, or separate different kinds of grain which have, from one cause and another, become mixed together. The separating of one kind of grain from another, as oats



THE ANGLE SIEVE GRAIN SEPARATOR.

from wheat, is far more difficult than the separation of impurities, and while there are many admirable machines which will readily take out straws, sticks, etc.,



THE ANGLE SIEVE.

there are but few machines which will make the separation of grain from grain in a satisfactory manner.

We give on this page an illustration of the Angle Sieve Grain Separator, which has now been before the public for some years, and for which many substantial claims are made. For general cleaning purposes the manufacturer believes it will fill every requirement, while at the same time it will separate oats and wheat raised together, by once passing the grain through the separator, and without running any wheat over into the oats, as machines which are claimed to be suitable for such a purpose are liable to do. Oats can be separated from barley in the same way, though not so rapidly as oats from wheat. This, we believe, is a separation which few or no machines attempt. The machine also cleans buckwheat, flax, rice, or any small seeds that can be cleaned on a separator.

The machine gets its name and relies for its excellent work on the peculiar angle form of the sieve, an illustration of which is given on this page. The salient features of the machine are covered by the patents of D. T. Weed and H. A. Webber. The machine itself is built of the best material, oak being used for the frame, and all other parts where hard wood is desirable. The shafts are of wrought iron, and pains are taken to make the machine durable in every particular.

The Angle Sieve Separator has already been largely

adopted, both by farmers and grain dealers, it being built in sizes and of capacities suitable for each class of users. The manufacturer has in his possession a large number of testimonials from those who are using the machine, speaking of its good qualities in terms of praise. It is made by Mr. D. T. WEED, of Lanark, Carroll Co., Ill., one of the patentees, and to him the reader who wishes to learn more of this machine is referred, as he will gladly give any desired information respecting it.

AN ENGLISHMAN'S OPINION OF CHICAGO ELEVATORS.

The writer of a series of articles entitled "A Trip to America," appearing in the London *Morning Post*, says: "No visitor ought to leave Chicago without seeing one of the large grain elevators in full operation. This is not easy unless you are lucky enough to time your visit to the exact moment when the operation of unloading cars takes place. The work is very swiftly done, the elevator swallowing the grain like a hungry dog devours a mouthful of meat, and is ready for more before any more is ready for him. The train of cars usually runs inside what may be called the ground floor of the elevator, and their contents are shoveled out by machinery into the cellars, from whence the grain is 'elevated' many stories high to the very top of the building by means of scoop-shaped buckets attached at short intervals to an endless band running over drums. Having been 'elevated,' it finds its way into one of the vast receptacles, where it is weighed, and awaits such further disposal as may be ordered. It is obvious that, having been raised to this height it is the simplest of operations to cause it to descend down any of the numerous wooden pipes in any direction that may be desired. All the arrangements are most systematic, and every kind and quality of grain is kept quite distinct—nay, it is almost impossible that there should be any admixture or confusion of the property of different consignors. There are sixteen of these elevators, with a combined capacity of 18,500,000 bushels. The total receipts of grain of all kinds last year were about 165,000,000 bushels. The number of vessels clearing the port (on the lake, of course) was about 14,000, with gross tonnage of 4¾ millions." [The writer is "a little off," both as to the number of the elevators and their capacity. There are twenty-five of them, and they average a million bushels apiece.]

AVERAGES BY STATES.

The following shows the average condition of the several crops named by states, according to the reports of the *Indiana Farmer*:

	Indiana, per cent.	Illinois, per cent.	Ohio, per cent.
Wheat, per cent. of condition.....	86	80	85
Oats, per cent. of average crop sown.....	98	100	100
Clover, per cent. of condition.....	85	80	80
Timothy, per cent. of condition.....	96	90	95
Apple buds, per cent. alive.....	84	90	80
Peach buds, per cent. alive.....	5	20	10
Rye, per cent. of condition.....	87	80	92
Barley, per cent. of condition.....	86	75	88
Horses, per cent. of condition.....	95	95	97
Cattle, per cent. of condition.....	95	98	93
Hogs, per cent. of condition.....	94	97	90
Sheep, per cent. of condition.....	93	92	92

Shining lights from the suburbs are growing weary of the affectionate attentions with which they are invariably loaded immediately upon their arrival on 'Change. They don't mind the attentions so much, but it is their enforced pedestrianism next day that makes them tired, so to speak. The walking between Chicago and St. Louis or Milwaukee, as the case may be, is not at its best at this season of the year.—*Daily News*.

The production of oats in the United States, crop of 1883, amounted to 571,000,000 bushels, against 488,000,000 bushels in 1882. The acreage sown last year was upward of 20,000,000. The least product per acre was in the Southern states, which, with one-fourth of the entire acreage produced but little over 61,000,000 bushels whilst Illinois alone produced 102,780,000 bushels. The Southern states generally show but from 10 to 16 bushels per acre, Maryland and Texas being the exception; the yield of the former last year averaged 20.2, and the latter 22.8 bushels per acre. The Western states show an average yield per acre of from 29 to 40 bushels.

Where machinery is used, the Drew Oil Cup will save fifty per cent. of oil. Write for circular. Borden, Selleck & Co., Chicago, Ill.

COMMERCE AND THE GRAIN TRADE.

(Oration of Chauncey M. Depew at the Dedication of the New York Produce Exchange Building.)

MR. PRESIDENT AND GENTLEMEN:—The opening of this exchange marks an important era in our national development. The wildest dreamer of the preceding generation would not have hazarded the prediction that in thirty years the merchants of this city engaged only in the handling of domestic food products would have required and possessed the resources to build a palace of commerce costing three millions of dollars. The modest rented room which met all your wants in 1860, expanding into this superb structure in 1884, illustrates the agricultural and commercial progress of this country in the last quarter of a century. The startling splendor of the facts reduces to ordinary experiences the wild creations of the Arabian Nights. This Exchange is an example of how the things most dreaded by our fathers are welcomed and utilized for the most beneficent purposes in our day. The one nightmare disturbing the dreams of the past was the dread of centralization. From some relic of those times still lingering among us we hear an occasional echo of the old universal cry. But out of the civil war the republic came, with more power in the general government than the federalists demanded, and upon the grave of state rights has grown an intense and absorbing nationalism. This tendency is seen in older countries, in the unity of Germany and Italy, and of people of a common race everywhere.

The same principle prevails in trade. But instead of the evils anticipated, it has made possible the wonderful results which we here in part celebrate. It has covered the land with the network of railways which carries the settler to the virgin fields and distributes the world over, the products of his industry. It has built the steamship and the telegraph. It proves the immortality of man that he always controls the mighty forces which he conjures. He is never their victim, but always their master, and his Frankenstein's are the useful servants of his will. Within the memory of most of you, it was possible for a single man to grasp all the agencies necessary for business success, and fight his way alone with limited resources. But now that steam applied transportation by land and sea comparatively eliminates time and distance between the places of supply and demand, now that the conditions of all the markets of the world are known in every market during all the hours of 'Change, now that the merchant must know the prospects of coming crops, the supply on hand at home and abroad, the price of money in America and Europe, the fluctuating freight rates in times of railway or steamship troubles, except for exchanges like this, all business would be concentrated in the hands of a few men with enormous capital. But just here, combinations like yours avert the dangers and receive the benefits of these tremendous conditions of modern trade. Your association reaches out and gathers the information; it places in the hands of all its members alike the factors of the business problem, and then it is not so much the magnitude of the capital as the skill in solution which determines success; then every one, with an equal chance, according to his means and ability, wins a living, a competence, or a fortune.

Thus commerce becomes in our civilization the strongest force in the conservation of law, order and property. There is nothing new under the sun, and our freshly imported socialists and communists in their wild ravings present the passionate appeals of the oppressed and injured of earlier times, without knowing their history or possessing their justification. Most of the great landed estates in Europe were acquired by the ancestors of the present owners, by conquests marked with all the horrors of arson, slaughter and slavery. The natural revulsion of the Saxon farmer tilling his own acres for a Norman master, with the iron collar of servitude riveted about his neck, was to the destruction of everything which represented or strengthened the dominant class. But with the absolute equality of all men before the law, with the prohibition of primogeniture and entail, and the tying up of vast estates for generations, with all the avenues of honor and thrift open and unobstructed, the reasons for the revolt have passed away. Two hundred years ago one-quarter of the population of Scotland was begging from door to door, because there were no diversities of labor, and therefore no employment. The great industrial trouble to-day in Ireland is the policy which has kept her purely agricultural, and deprived her of manufactures and trade.

Commerce enforces the law, and the lesson that the

accumulations which make possible great enterprises, prosperous manufactories, the opening and working of mines, and the cheap and rapid handling of all the products of the earth, the forge and the loom, are necessary, if great populations are to be maintained, made happy and enriched by employment and opportunity. The rich man who has no sympathy with the poor insults his own beginnings or the hard-working father or grandfather to whom he owes his wealth. The poor man who would level all property stands in the way of the welfare and rise of his children.

Commerce demands for its operations first of all, security. No pirates by sea or robbers by land may prey upon it. Neutral states and warring territories must respect and insure protect it, from losses by the elements. And so we have that confidence which begets credit, the handmaid of enterprise, courage and brains. With credit, men of capacity outstrip the slow and cautious movements of capital, and in the utilization and encouragement of invention and discovery, agriculture, manufacture and the trades of every kind receive new development and impetus. The other requisites are freedom of labor and adequate and reasonable transportation. These principles have made, in all ages, commercial centers the nurseries and asylums of liberty and civilization.

No picture of human misery equals that presented in the Middle Ages, where the robber barons plundered and outraged all without their castle walls. The world, sunk in misery, was sinking into savagery, but the merchants in the Hanseatic League and the cities of Holland preserved freedom, saved learning, rescued civilization, and kept religion alive. When the cities of the League, after 500 years of successful struggle, surrendered their autonomy to Bismarck's idea and the German Empire, it was the last and most fitting concession to the triumph of law and the security of commercial rights in modern government. It was a commercial company which conquered India and added 300,000,000 of subjects to the British crown. It is commercial enterprise which supports Stanley on the Congo, and adventurous explorers all over Africa, and which will bring the Dark Continent and its people within the lines of civilization and Christianity.

Having secured all the elements necessary to its successful prosecution, trade is no longer monopolized by greatest companies like the East India, the South Sea, and the Hudson Bay. The individual, emancipated and free, asserts himself in business as in the state. Competition stimulates and limits his enterprises. By far the great and most important branch of modern commerce is feeding the toiling millions for whom our complex civilization has afforded other occupations than tilling the soil. The limitless acres on our prairies and in our valleys brought by rail within easy reach of the seaboard, and by steamer in close connection with all the markets of Europe, furnish to us the opportunity of supplying food for the world and draining its wealth into our industries and treasures. Have we the statesmanship, the patriotism and business ability to profit by the situation? A few figures will illustrate by what rapid steps we have reached this power for enormous production: In 1850 there were 1,500,000 farms in the United States; in 1880 there were 4,000,000; in 1850 we raised 592,000,000 bushels of corn, and in 1880 we raised 1,800,000,000; in 1850 we raised 100,000,000 bushels of wheat, and in 1880 we raised 460,000,000.

In 1873 the balance of trade turned in our favor by the export of these products, and continued in increasing volume year by year until at its height, in 1883, the cereals of the country had repaired all the losses of our greatest panic. American competition drove the British farmer into bankruptcy, and the Continental one to despair. Two thousand men own the soil of Great Britain, and the tenant farmer pays from five to ten dollars per acre a year rent. Onerous taxes to support standing armies and vast military establishments, bear with crushing severity upon the German, French and Russian agriculturist. One-tenth of the best labor of the land is idle in the army. The average assessment to support these great organizations is four dollars per head of the population, while in our great West the annual rent of an English farm buys a homestead in fee, taxes are nominal, and transportation the cheapest in the world. Unless England breaks up her vast landed estates into small holdings, unless the nations of the Continent disband their armies, the markets of Europe must be ours, and they can only be lost to us by our own folly.

The exhaustlessly fertile lands along the Nile, and in

the other granaries of the ancient world, possess all their pristine productiveness. Bad government has for ages cursed them with desolation. But with England, powerful everywhere in the East, and looking for cheap food for her operatives, that by cheaper labor she may be able to undersell with her manufactures all competitors, these Oriental fields might blossom and bear as of old. We can conjure this mighty spirit, and already he shows dangerous signs of life. In the time of Pliny, Egypt ruined the Italian farmer, and in the time of Pompey, Italy was given over the vast grazing farms, and her agriculturists driven to cities or the legions, because Egyptian wheat could be bought in Rome for seven cents a bushel which cost the Italians a dollar a bushel to raise.

Two years ago the speculators of Chicago, acting upon a theory which might have been well enough if food products could have been purchased by Europe only from America, by gigantic corners and other artificial processes, drove the price of wheat up to fabulous figures. The effect was magical, and roused to efforts to share in this wonderful wealth of annual harvests, people who had slumbered for centuries. The Russian railway penetrated the rich mold along the Black Sea, and elevators were built at Odessa. English capitalists furnished seeds and implements to the patient Hindoo, and the British Government ran railroads through the valleys of India. The Creek Islands awoke to a new life, and the banks of the Nile once more responded to intelligent culture. And now we are exporting gold instead of wheat, and accumulating debts instead of dollars. In the wheat pit of Chicago in a single year was buried more of the future prosperity of the Republic than the sum of all the traffic which flows through the great city would mount up to in a decade.

It is in this field of activity where the New York Produce Exchange can fulfil a most patriotic and powerful mission. It handles seventy-five per cent. of the exports from the country, and its legitimate transactions reach the enormous money value of ten millions of dollars a day. It is organized to deal in the food products of the Republic, not to gamble in them. [Applause.] In noble and memorable words its constitution recites that "the purposes of our institution shall be to inculcate just and equitable principles in trade." Under this banner the interchanging surplus of harvests and manufacturers of temperate and tropical climes and diverse industries will bless and enrich the land. You are a great commercial congress, and can represent the opinions and interests of the lonely homesteader following the furrow across the prairies of Dakota, the giant farmer plowing by steam power the fields of Minnesota, the toiling millions dependent upon active capital and prosperous trade in the great cities and manufacturing towns. To one and all of them the honest handling of the harvests and the control of the markets of Europe is a question of life or death. Greed, which penal laws cannot reach or patriotism curb, can be defeated by education and intelligence.

Let some of the millions now squandered by the Government in the vain effort to turn turtle ponds into inland seas, and trout streams into navigable rivers, to perpetuate some local statesman, be wisely spent in organizing a bureau of information so vast and yet so accurate that misrepresentations as to the daily prospects of the crops at home and abroad, as to the supply on hand in domestic and foreign markets, as to prices in the world's marts and the conditions of transportation, will be impossible, and make all these factors at all times accessible to every citizen. Then audacity cannot play on credulity, and fiction upon ignorance, and a ring of speculators regulate at will the ebb and flow of our national life. Let the morning and evening trains, as they rush across the farms and along the highways, carry the signals of the weather bureau, so that the advantages of the prophecy may be utilized by every husbandman. Concentrate upon the national capital your wisdom and experience to avert the evils of debased currency, to be followed by ruined credits. A Chinese wall of silver dollars, of fluctuating and depreciated value, artificially built about our business, must result in untold calamities, and a constant and alarming drain of gold.

The necessities of their position have intensified the natural hostility of our foreign competitors. Every art invented and perfected in centuries of fiercest rivalry among commercial peoples, is used to defame our food products. Our reputation for sharpness and smartness is enormously enhanced for the purpose of supporting wholesale charges that disease or adulterations are with us common and applauded forms of fraud. The German Chancellor and the British Parliament have given

their great authority to assist in these assaults upon our good name. This question has become one of the gravest national and international importance. The truth is now so rapidly and universally diffused, that neither the falsehoods of traders or the orders of autocrats can long sustain misrepresentations if every basis for them is taken away. The New York Produce Exchange has heretofore done great service in this great work, but with the new strength and prestige which is on this day so conspicuously presented, acting both as representative and custodian of our honor and prosperity, formulating rules conducting investigations and enforcing justice with the utmost rigor and impartiality, and constantly and fearlessly vindicating those who are unjustly attacked, and exposing those who are guilty, it must eradicate every justification for slander, establish beyond the possibility of dispute the purity of the products we export, the integrity of the men who raise or manufacture, and of the American merchants who trade in them.

HOW EASTERN ELEVATORS ROB FARMERS.

Although the abolition of tolls on the Erie Canal has done much to attract the through trade of the Northwest, American shippers are still subject to a heavy toll in the shape of elevating charges, and a movement is now on foot to have these fixed by law. The New York Chamber of Commerce has taken the question under consideration, and on its action in the matter much will depend. The following figures appear in a communication that is now the subject of discussion in the New York Board: Of the 36 grain elevators in Buffalo 17 of them did not open their doors during 1883, and some of them never had a belt on; 19 were used alternately, but at no time were over 12 of them manned for business. But the grain passing through Buffalo paid a big margin on the 24 not used. They charged vessels and propellers \$5.25 per 1,000 bushels to unload them, when \$2.50 per 1,000 bushels paid the bill in any Canadian port. Their charges for trimming grain to the leg of the elevator are from 40 to 60 per cent. higher than in numerous other ports. The following exhibit shows their receipts, expenses and profits:

RECEIPTS.		Per 1,000 bus.
Vessels pay for trimming.....		\$ 4 00
Vessels pay for elevating.....		1 25
Grain pays for blowing.....		7 50
Grain pays for blowing.....		1 25
The screenings blown out of the grain is worth on an average.....		25
Total receipts.....		\$14 25
EXPENSES.		
To trimmers.....	\$2 00	
To running expenses.....	1 00	
Total expenses.....		3 00
Profit.....		\$11 25

Men whose business makes them familiar with the elevators in Buffalo say that 50 cents per 1,000 bushels will pay the running expenses of the large elevators. An average-sized elevator in Buffalo can handle 150,000 bushels in every twenty-four hours, and will clear, under the present way of doing business, \$1,637.50; at even 100,000 bushels per day it pays them \$1,125 clear profit per day; in other words, they clear $1\frac{1}{2}$ cents per bushel on all the grain received by lake, which was 67,207,355 bushels, making a total profit to the elevator ring in Buffalo of \$656,009.19. This means a simple transfer. We have no means of knowing how much they receive for storing grain, but are safe to place the amount at \$250,000, making it nearly \$1,000,000 per year.

Buffalo turns out bad enough, but the elevator men in New York harbor can discount Buffalo in charges. In New York harbor they charge \$7 per 1,000 bushels for trimming grain in ships; in Chicago 75 cents per 1,000 bushels pays the bill. A load of staves is about the same bulk as a load of oats, and the elevators in New York Harbor charge a canal boat over \$81 to discharge 262 tons of oats by steam—56 per cent. more than it cost to put off the staves by hand, yet they ask to be let alone. The following exhibit shows the receipts, expenses and profits of an elevator in New York harbor for transferring:

RECEIPTS.		Per 1,000 bus.
Canal boats pay for discharging.....		\$ 5 00
Grain pays.....		5 00
Grain pays for blowing.....		2 50
Vessels pay for trimming in.....		7 00
Total receipts.....		\$19 50
EXPENSES.		
To trimming canal boats.....	\$1 50	
To trimming vessels.....	3 00	
To running expenses.....	1 00	
Total expenses.....		\$5 50
Clear profit.....		\$14 00

This statement shows that they clear one and four-

tenths cents per bushel for transferring. Like Buffalo, an outsider cannot tell how much they get for storing grain, but it is safe to place the amount at \$1,000,000 per year.—*Northwestern Miller.*

STATE REGULATION OF THE RAILWAYS AND RAILWAY RATES.

An article in the May number of the *North American Review*, by Mr. Gerrit P. Lansing, treats of the "Railways and the State," in view of the demand that has for years been very extensively made that the management and perhaps ownership of the roads should be taken under the special consideration and control of the general government. The writer claims that the history of our great railway systems clearly prove that for the advantage of the public, both of the producers and dealers, it is wiser to permit free, untrammelled competition as to rates, etc., the government limiting its action to the general principles of protecting property in its legitimate use and preventing its encroachments on the rights of others. The rapid growth and vast extent of our railroad interests are seen in the fact that while there are persons now living who heard the puff of the first locomotive operated on this continent, we now have a network of roads over 120,000 miles in length, extending from the Northern Lakes to the Gulf, and from the Atlantic to the Pacific coasts, connected with all our producing and manufacturing centers of industry, and almost with every town and hamlet of our vast territory. While the incalculable value to our national and individual prosperity, in opening up the resources of this territory to production and commerce which before was only a desert, is admitted by all, still, as these corporations have become wealthy and powerful, placing huge aggregates of capital in the hands of a few owners, whenever, for any reason, trade is depressed, they are decried as great monopolies, and, by controlling freight rates, are charged with being the cause of the depression in business.

In claiming that the facts show that this is not true, the writer shows that the regulating forces of natural competition in steadily lessening the rates of transportation, are the competitions of capital seeking investment; of parallel lines of carriage, either by waterways or roads; and of the different European markets. Besides these competing factors is the lesson of practical experience, showing that increase of traffic, obtained by a decrease in freight rates, produces an increase of the net profits in a much larger ratio than that of the increase of expenditure, even when augmented in fact by the loss of revenue caused by these lower rates. Capital, in seeking investment, is far more sensitive to the question of security and certainty than to that of the largeness merely of the returns. In the history of our railroad building this seems to be clearly demonstrated by these facts: In the eight great agricultural states of the West, with Dakota and Illinois at the limits of a Northwestern diagonal, the annual amount of railroad building had reached in 1872 over 3,000 miles. During the four years of 1874-77, while the "Granger acts" were in operation, the average fell to 520 miles per annum. Various states passed specific laws relative to rates, etc., in obedience to this granger hue and cry in 1874. In 1876 the United States Supreme Court decided these acts constitutional, although the able jurists, Justices Field and Strong, dissented. A reaction has since occurred in public sentiment, and this restrictive legislation has been practically set aside, with the result that in the eight states mentioned the number of miles of road built in 1880 was again over 2,900. Doubtless other causes were in operation during this period, but the facts prove that this was the main one active in this marked decline in railroad building.

The value of parallel competing lines of traffic is self-evident, and has led to the request that the government should take possession of certain waterways, improving them so as to add to their value in lessening freight rates. Of this Mr. Lansing does not treat, but refers to the suggestion made during the granger period, that the United States should build, equip and manage a grand line of railway, running east and west. This was apparently indorsed by the Senate Commission in 1874, who predicted that in such a case the freight rates on cereals would be reduced to $7\frac{1}{2}$ mills per ton per mile. This advice was not taken, however, but the actual result of the natural competing forces has been to reduce the freight rates of grain from Chicago to the seaboard from $12\frac{1}{2}$ mills in 1872 to $5\frac{1}{2}$ mills per ton per mile at pres-

ent, or more than one-half of the former rates, and one-third less than those predicated on government ownership.

The influence of foreign markets upon the rates of transportation, which are, as calculated from any given point, an actual part of the cost of production, is very obvious. To secure and encourage production and traffic, the roads must so apportion the costs of transportation relative to other factors of cost that there will be practically no difference in the total costs at near and distant points. How well this has been done, with all the means of telegraphic communication in use, is shown in the steadiness and reliability with which the huge grain traffic of the world is carried on, involving immense distances, lengthy periods of time, and vast risks; and yet, if the element of over-speculation and grain gambling were eliminated, the calculations could be made on these transactions, and be as well assured as the courses of the planets.

Of the actual effect on freight rates of the action of the last regulating natural force mentioned, there is a very inadequate general appreciation. The writer shows the practical value of the truth stated as to the relative increase of the net income of railroads compared with the costs of increased tonnage, with the diminution of rate income added, by a few statements taken from the history of the four great Eastern lines during the five years of 1875-80. At the beginning of this period in 1875, these roads carried 1,203,051 tons of freight per mile against 2,032,360 in 1880. The rates per ton per mile were respectively 1.163 and .876 cents, and the net income per ton was in 1875 \$4.97, against \$7.29 in 1880. The conditions of the Central Pacific, with its many miles of road passing through sparsely settled districts, giving a much smaller relative increase of traffic, would seem less favorable for this test, but Mr. Lansing states that during the five years ended in 1882, this road has decreased its tonnage charges to sixty-seven per cent. of those charged at the commencement of this period while the Eastern roads, in the period mentioned, decreased their charges only to seventy-five per cent. of those at the beginning. The increase of tonnage was sixty-nine per cent. on the latter, against forty-seven per cent. on the Central Pacific.

It will be noted that the above facts and reasonings have but a slight bearing on the proposed congressional legislation as to inter-state commerce, which does not propose to fix details of rates, etc., but to compel the roads, while under the protection of government, to pursue no methods either of unjust discriminations or by means of pools and rings using their property and franchises to the detriment of the public interests in production and commerce. There is also an admission generally of the practical necessity of combinations called pools, that are now by state law illegal, and, at least extra-legal. These should be legally controlled for the same ends as above, and necessarily by the general government.

Some time ago the New York *Herald* announced the arrival at Laube, on the Elbe, Bohemia, of 5,000 tons of American wheat, the first American wheat that ever entered Austria. Our Consul-General at Vienna, however, states that a thorough investigation fails to verify the *Herald* report, and says that no American wheat, but only American rye, has been imported as yet into the empire, although large quantities of wheat have been sent up the Elbe to the very frontier of Austria. It is probable that the entry duty of 50 kreuzers per metrical centner (20 cents per 220 pounds), equivalent to $5\frac{1}{2}$ cents per bushel, required to be paid when crossing the Austrian frontier, has been sufficient to shut out, for the present at least, the importation of American wheat into Austria, whereas the duty on rye is only half that on wheat, viz., 25 kreuzers per metrical centner.—*Millers' Journal.*

Apart from the price, the dishonesty of some of the New York merchants seems to have a great deal to do with the absence of demand for our wheat, says the New York *Sun*. Complaints are heard on all sides of wheat being constantly adulterated in New York. It appears that Baltimore and Philadelphia standard is considered always worth two or three cents a bushel more than New York. Europe takes from us only No. 2 red winter wheat. The standard of this wheat is quite satisfactory in St. Louis and Chicago, but it seems that Toledo, Buffalo and New York are in the habit of mixing the good wheat received from the West with all sorts of trash. Rye, barley, cockle, cheat, chess, and a lot of things that a layman has never heard of, are mixed up with it. As a matter of course, nobody wants such stuff, and the speculative shipments have to be sold for what they will fetch.

THE OUTLOOK FOR WHEAT.

The Cincinnati *Price Current* of May 8 presents to its readers the results of its recent special inquiries in reference to the growing cereal crops of the country, especially wheat. In regard to the latter, the estimates are made from investigations made almost exclusively in those counties of the various states that are relatively the most important in the production of wheat, which method previous experience is claimed to show gives very close approximate results. The entire wheat area of our country is officially reported at about 27,600,000 acres, or nearly the same breadth as was sown last year, of which from five to six per cent. was eventually plowed under, leaving barely 26,400,000 acres for harvest. The acreage sown this year varied but slightly from the average for the four years prior to 1883. Last year the aggregate production fell short 40,000,000 of the above four years' average, the winter wheat being also below the average quality, but a large proportion of the spring wheat was in this respect better.

The present outlook for the winter wheat crop is generally favorable, although a large portion is backward. Recent rains and low temperature, the report says, have been favorable. The returns indicate ninety-six per cent. of a full average for the whole winter wheat belt, against eighty-two at this time last year; that is, the present condition is about seventeen per cent. better than last season at this time. This indicates an aggregate crop of 350,000,000 bushels, exclusive of the increase in winter wheat acreage.

In most of the spring wheat sections the conditions for seeding have been favorable, and for the most part it has been accomplished in good time; a little late, however, in the southern portion of the belt. There is an increase of area in Minnesota, Dakota and Iowa over last year, and not much variation in the other sections. In Nebraska the spring crop is doing nicely. In Iowa seeding was a little late, but the crop is very promising. In Minnesota the seeding was not quite finished at time of the returns, about May 3, but the ground was in good condition, and the outlook favorable. The returns were scanty from Dakota, but indicated favorable conditions as to ground, seeding, etc., with prospects never better, at the same season. In Wisconsin there was an average condition. The above states, with New England, produced last year 125,700,000 bushels of wheat, which may be considered the spring crop proportion. While estimates are not as yet reliable, this crop may be expected to fully equal—perhaps surpass—last year's, but not more than 135,000,000 bushels can be confidently expected.

The writer considers this a pivotal period in our wheat crop, and the above estimates indicate an aggregate crop of 485,000,000 bushels, against an average of 460,000,000 in the four years previous to 1883, the largest yield being 504,000,000 bushels in 1882. Last year's crop was supplemented by a surplus of 50,000,000 from 1882, making an aggregate supply of 470,000,000 bushels. The anticipated reserve at the close of the present year will not much exceed the above mentioned.

As to the different winter wheat states, the report gives very full details, from which we take the following general statements: Ohio had last year a crop of fifty-nine per cent. of the four years' average, as above. With few exceptions, the outlook and condition of the growing crop is good, although the plant is backward. Very little winter-killing has occurred, but there were some back-sets from the April dry weather, for which late rains have been beneficial. The estimated general condition is eighty-seven of the average named, or about thirty-three per cent. better than last year. In Indiana last year's crop was sixty-six per cent. of the above standard; one-half of this year's returns indicate its full average. The general outlook is of ninety per cent. of the average, or twenty-two per cent. better than that of a year ago.

The Illinois crop of last year was only 48 per cent. of the four years' average, which included a small crop in 1881. About one-fourth of the present returns indicate 100; the general average seems to be about 75 per cent., or 40 per cent. better than last year. Missouri, last year, had a crop rated at 91 per cent. of the four years' average; the present general condition indicates a full average, or 18 per cent. better than last year's estimates at this time, the ultimate result exceeding the promise. Kansas, last year, produced 14 per cent. less wheat than in the year previous. Her present condition is very

promising, indicating 105 as compared with the standard used, or 30 per cent. better than the promise at this time a year ago, which also improved in the outcome.

Kentucky stood 80 at this time last year by the standard, but the results were disappointing. The present indication is about 95 per cent. of the average named. Tennessee had a crop last year rated at about 92 as above; her present indication is fully 100 or higher, or a little more than a 10 per cent. improvement. The condition of Michigan wheat was 82 at this time last year; the present condition, though the growth is backward, is 90, or about the same as last year's result. The West Virginia wheat crop—not an important one—was 92 last year, and indicates 95 or higher this year.

The four Middle states—New York, New Jersey, Pennsylvania, and Delaware—last year presented 88 per cent. of the average adopted; the indications are now of the full average. Last year the eleven Southern states produced 90 per cent. of the previous year's average, or the equivalent of the four years' standard as above. The present indications are somewhat higher. The Pacific states and the territories—exclusive of Dakota—produced a crop last year 12 per cent. better than the four years' average; the prospects are favorable at present for some gain. The above states and territories comprise our winter wheat belt. The small amounts of spring wheat grown in parts of them are balanced by the winter wheat grown in parts of the spring wheat belt.

Of the other cereals the report is quite meager. Corn planting has been a little late generally, but attended by a favorable condition of the soil. It is just now delayed by wet weather, not, however, reaching extensive areas. Replanting is expected to some extent, and the object is to produce a large corn crop. The oat area is estimated at about the same as last year, with equally fair conditions.

THE CHICAGO ELEVATORS.

There are twenty-three elevators in this city, whose names, capacity, etc., are as follows:

The "Air Line," has a brick first story, and is covered with slate above a tin roof. Its capacity is 740,000 bushels.

The "Armour, Dole & Co. A Elevator," is 136 feet in height, brick-covered 26 feet; 60 feet with slate, and 26 feet iron-clad. Its capacity is 1,300,000 bushels.

"Armour, Dole & Co. B House" is 136 feet in height. It is brick-covered 100 feet, iron-clad 20 feet, and cupola frame with shingle roof. Its capacity is 800,000 bushels.

"Armour, Dole & Co. C Elevator" has a capacity of 1,750,000 bushels. It is 142 feet in height, with slate covering, iron-clad cupola, and a tin roof. It has a brick boiler house.

"Armour, Dole & Co. D" has a capacity of 2,000,000 bushels. It is brick-covered 60 feet on three sides; iron-clad on river front to the top of building, and is 145 feet high. It has a brick boiler and engine house.

"Central A" Elevator has a capacity of 1,000,000 bushels. It is brick 70 feet, and iron-clad above, with tin roof.

"Central B" House has a capacity of 1,600,000 bushels. It is brick-covered 70 feet; iron-clad 60 feet, with tin roof. There are fire escapes at the south end, and iron stairs in brick shaft at the north end.

"Chicago and Pacific" Elevator has a capacity of 1,000,000 bushels. It is 80 feet high, and entirely iron-clad.

"Chicago and St. Lou's" Elevator has a 1,000,000-bushels capacity. It is 109 feet in height. The first story is stone; balance covered with slate, with slate roof.

The "City" Elevator has a capacity of 1,000,000 bushels. It is brick-covered for 85 feet; the remainder is unprotected. It has a brick boiler and engine house.

The "Danville" has a capacity of 350,000 bushels. It is 65 feet high, including cupola. It is iron-clad on the west, north, and part of south sides.

The "Fulton" has a capacity of 350,000 bushels. It is brick-covered 25 feet; slate 50 feet, iron-clad 55 feet, with tin roof.

The "Galena" has a 700,000-bushels capacity. Its total height is 117 feet. It is brick 25 feet; slate 50 feet; iron-clad 42 feet, with tin roof.

The "Illinois River" has a capacity of 175,000 bushels. It is 100 feet high, and iron-clad to top.

The "Indiana" has a capacity of 1,500,000 bushels. It is 140 feet high; brick-covered 80 feet, and balance iron-clad, with tin roof. It has a brick engine and boiler house.

The "Iowa" has a 1,500,000-bushels capacity. Its height is 135 feet; 75 feet brick, and 60 feet iron-clad, with metal roof.

"National" Elevator has a capacity of 1,000,000 bushels. It is 135 feet high; brick-covered 95 feet to cupola, which is covered with 5-inch tiles, with a tin roof.

The "Neely & Hambleton" House has a capacity of 750,000 bushels. Its height is 60 feet. Main building is brick; on three sides frame, but not slated on river front. Cupola is slate-covered; composite gravel roof.

The "Northwestern" has a capacity of 500,000 bushels. It is 125 feet high; 60 feet brick, 65 feet iron-clad, and tin roof.

"Rock Island A" has a capacity of 1,250,000 bushels. It is 150 feet in height, and is entirely iron-clad. The boiler and engine house is brick.

"Rock Island B," is a house of 1,000,000-bushels capacity. It is 126 feet high; 80 feet, iron-clad; cupola not protected; metal roof. Engine and boiler house is brick.

The "Union" has a capacity of 700,000 bushels. Its height is 100 feet; 65 feet being brick, 35 feet iron-clad; with tin roof.

The "Wabash" Elevator has a capacity of 1,500,000 bushels. Its height is 140 feet; brick covered, 80 feet; iron-clad, 60 feet, and tin roof. It has brick engine and boiler house.

The "St. Paul" Elevator has a capacity of 1,000,000 bushels. It is brick-covered about 75 feet; iron-clad with tin roof. The height is 130 feet.

The "Fulton," only 40 feet distant and using the same boiler and engine house, is in fact a part of the "St. Paul," and they are connected by an iron bridge on bin floor.

General Items.

The four bucket-shops operated at Peoria, Ill., have been compelled to close up on account of the action of the Chicago Board of Trade in preventing the use of its quotations.

Shipments of grain from New Orleans to foreign ports during the month of April were confined to 193,784 bushels corn. As compared with same month last year there is shown a decrease of 1,061,016 bushels corn and 180,449 bushels wheat.

The suspension of Bultman, Tomkins & Co., grain and commission dealers, was posted on the New York Produce Exchange on April 26. The cause is said to be the sudden rise of wheat on the preceding day. An assignment was filed at noon, with preferences amounting to \$55,400.

"Any kind of a President will do for the bears on 'Change,'" says the *Baltimore American*, April 24, "so that they get a Secretary of State who won't write any more letters on the wheat outlook. Mr. Frelinghuysen's document yesterday bulled the market to the tune of two and a half cents."

An operator in grain at the New York Produce Exchange, who was long of wheat, made known his situation one day last week in the following language:

"No bread to eat
No place to sleep,
And all because
I'm long of wheat."

Says a local paper: "One of the edifying features of the entertainment offered the disinterested spectator on 'Change' is the picture of a veteran bull or bear when he is 'rattled.' He loses his head completely and 'covers' his 'shorts' at a loss of several thousand dollars ten minutes before a break that would make him a fortune. He is then no longer 'rattled,' but tells you coolly he did it to punish himself for selling on a 'bulge.'"

The California press state that for several weeks prior to the middle of April the incessant rainfall created great apprehension. But, with some few exceptions, the damages were trivial, and the wheat crop promise is excellent. It is estimated that there has been an increased acreage in wheat of at least ten per cent., and more will probably be turned under. With a prospect of the largest wheat crop ever raised in the state, the condition is clouded by the anticipation of about the lowest price ever known. The speculators' gauge of value is, seller 1884, at \$1.36½ per cental. Shipping wheat had reached \$1.45, and was still declining. The Liverpool wheat market is the lowest known for years, but the charters are also low, or the market would be still lower.

Canals and Marine.

It has been announced that the Canadian Pacific intends making Fort William, instead of Port Arthur, their Lake Superior port. Fort William, situated at the mouth of the Kaministiquia River, affords a natural excellent harbor, which was originally selected, it is said, by the McKenzie government for the railway terminus. The present administration made the change before the road was handed over to the syndicate, and large sums have been wasted to make a port at Port Arthur. The Railway Co. will commence at once the construction of a million-bushel elevator at Fort William.

The opening of lake navigation, and the starting off of the first grain fleet from Chicago, occurred on April 26. Several essays had been made before, and the steam barge, Mary Mills, passed up on April 24, being the first through, and had reached Manistique. There are in all fifty-eight vessels, having on board 2,514,000 bushels of grain, valued, grain and vessels, at about \$6,000,000. The officers and men employed number 900. It is stated that the Continental Insurance Co., has entered the hull and cargo pools, but there are a large number of companies still outside, and it is not expected that the cutting in cargo rates will cease. The bulk of the grain goes to Buffalo.

An order was issued on May 3, by the Executive Committee of the Cargo-Insurance pool, of Chicago, reducing the rates to nearly one-half the former tariff, and 10 per cent. less than the outside cut-rates. No discrimination is made between steam and sail vessels. The following schedule is for vessels of classes A 1, A 1½, A 2, and A 2½: From Chicago and Milwaukee to ports on Lake Erie, 40 cents; also to ports on Georgian Bay, 35 cents; to Sarnia, 30 cents; to ports on Lake Ontario, 75 cents; to Ogdensburg, \$1; to Montreal, \$1.25. From Duluth to ports on Lake Erie, 60 cents; also to ports on Georgian Bay, 50 cents; to Sarnia, 50 cents; to ports on Lake Ontario, \$1; to Ogdensburg, \$1.25; to Montreal, \$1.50. These rates are net.

The seaboard is apt to look down upon the tonnage of lake vessels as comparatively rather a small affair, but many of these vessels register 2,000 and 3,000 tons of cargo each, and still larger craft will be put in the stocks as soon as the depth of water in the channels and canals is made adequate to their use. This is a matter of growing importance to the commercial interests of the nation, and fairly calls for active aid from the general government. Work has been commenced in various harbors and channels, and requires appropriations for its continuance. The largest cargo of grain shipped in one vessel from Chicago was recently on the steamship Onoko, 163,533 bushels of oats. The largest last season was 130,000 bushels.

The export grain trade of Montreal, Canada, presents a very discouraging condition to those interested in it. The steamship Lake Champlain recently sailed for Liverpool with only a few thousand bushels of grain, 250 head of cattle, and a large quantity of phosphates. The latter hitherto has been utterly refused as a cargo for steam vessels, even when \$25 per ton was offered. Another index of the low condition of the grain trade there is shown by the fact that the Kingston & Montreal Forwarding Co. have placed several barges in the coal trade, and if no improvement in grain occurs will add several more to the coal fleet. So serious has the situation become that a leading shipper said that he anticipated, before the close of the season, ship-owners would offer to carry grain home free. Grain merchants oppose, as the only solution, that the government dispense with collection of tolls for this season. For this purpose deputations have been sent to Ottawa to urge the matter on the government. It is also suggested that elevating companies make their rates the same as last year, and that forwarding companies reduce their rates one-quarter of a cent per bushel. Chicago grain merchants have telegraphed to Montreal that they will send their cargoes via Buffalo in the event of forwarding companies not reducing their rates from two and three-quarter cents to two cents per bushel.

THE FUTURE OF CANADIAN WHEAT.

The Toronto Globe, in reviewing the present depression in the wheat trade, with the now fully ventilated facts in this relation, takes a somewhat gloomy view of the future of Canadian wheat. The condition of the British market, relative to which, on account of short crops here and in Europe, a very different estimate as to demand and prices had been made than has been realized, causing heavy speculative proceedings in the Chicago wheat traffic, has brought a check on exportation, and the consequence has been disastrous in results. For the seven months ended March 22 last, the total export of wheat from Chicago was about 25,000,000, against nearly 49,000,000 bushels in the same period of 1882-3. The loss was immense, while there has been also, it is said, a depreciation in Indian wheat sent to England since Aug. 1 of over \$10,000,000.

The export supplies of Australia and India have been very greatly increased, while the yield of Western Europe was so much better in quality and quantity than was anticipated, that England has required it is said, since Sept. 1, some 5,600,000 hundred weight less of wheat and about 1,250,000 less of flour than in the corresponding period of the previous year. Western Eu-

rope now obtains her supplies from so many different sources with their surplus and failure offsets, that hereafter wheat can never be expected to command a high price, and will be entirely out of the reach of speculative ring control. This latter prediction, if it prove true, may be an immense mitigation of the gloomy views taken as to the profitable future culture of this cereal in the new Northwest, and its production, transportation and trade may be placed on a healthier and more reliable basis.

OUR GRAIN PRODUCTION.

On the 26th of February the Senate of the United States called upon the Commissioner of Agriculture to give the annual amount of wheat, rye, corn and cotton produced in this country during the five crop years preceding 1882; the amount used at home for food, fodder, seed, and other purposes; the amount exported and the surplus, if any, at the close of said crop years. The Senate also wished to be informed in answer to the same questions for the crop year 1882; the amount in 1883, the amount already consumed, with the requirements of the country and for what purposes, to the end of the crop year; the condition of crops now in the ground, with the extent and character of injury to the crops of 1883. Besides these questions the Senate also asked whether, in his judgment, speculations in options or futures in these products, where no actual transfer of the property takes place, tends to influence their market value to the injury of producers or consumers.

The Commissioner made reply March 24 to these inquiries, with the exception of the latter, about which he simply says his department has no official information on the subject, and has made no investigations of the influence of speculation upon productive industry. Evidently Mr. Loring does not think this species of inquiry comes within the scope of his duties, a very sensible position to take, we should say.

Regarding the condition of the winter wheat grain sown last fall for crop of 1884 the department returns show it to be in good condition as a general thing. The heavy covering of snow over a large extent of territory gave great protection. In the Middle states the fall growth was fair. In the Atlantic states, from Virginia southward, the area was considerably increased, and the drill and special fertilizers were more freely used than heretofore. Drouth prevented sowing in portions of Georgia, and about the same things is said of the Gulf states. There was a scarcity of seed in Arkansas. Tennessee has an excellent prospect. Kentucky sends a more variable report. Seeding was late in Ohio but a favorable growth was made. A similar report is made from Indiana and Illinois. The growth was somewhat retarded by a cold, dry autumn. Seeding was late in Missouri on account of drouth. Excellent reports are made from Kansas. In the middle belt from Pennsylvania and Virginia to Kansas the fly caused more or less injury, but not serious except in a few localities. The Commissioner remarks that it is gratifying to notice the repeated references of his correspondents to the improvement in the appearance of winter wheat grown on under-drained land, and to the extension of tile-draining improvements throughout the winter wheat states.

Just at this time when the bottom has tumbled completely out of the wheat market the cause thereof as explained by the statistician is of peculiar interest.

The distribution of the wheat of 1882 is 48,000,000 bushels less than the production, which increases the supply the present year of consumption to 468,000,000 bushels. The requirement for consumption, on the basis of a population of 55,000,000, is 252,000,000 bushels; for seed about 53,000,000 bushels; or 312,000,000, exclusive of exportation. The exports from July 1, 1883, to February 29, 1884, were 71,321,539. If continued at no greater rate of shipment the exportation of the year will not exceed 97,000,000 bushels. This would make the distribution 409,000,000 bushels, while the estimated production was 420,000,000, exclusive of the surplus of the crop of 1882. This leaves an adequate supply for any probable emergency.

If we take the results of the March investigation, we find 119,000,000 bushels in the hands of farmers, and 31,000,000 in elevators and warehouses, or 150,000,000 un-milled, in addition to flour in mills and on the market. The spring wheat requirement for seed is not above 15,000,000, and a possible export of 35,000,000 will then leave 100,000,000 for bread, besides the present stock of flour, in course of distribution. The wheat of the South will be ready for milling before half the available supply is consumed.

An erroneous impression has been derived from the fact that the European crops of last year, as estimated, were less by 78,000,000 bushels than the average production. But the product of 1882 was 126,000,000 above that average, giving an excess of 48,000,000 above the rate of consumption of the prior period of eight years.

The statement is as follows:

Annual average, 1874-81.....	Bushels.
Annual average, 1882.....	1,143,825,044
Annual average, 1883.....	1,270,167,150
Annual average, 1882.....	1,068,088,888

To this excess of 48,000,000 add 48,000,000 bushels surplus in the United States in 1882, and increased production in India, and it will not be difficult to understand how the markets of the world have been glutted during the past year. To gather in the surplus of 1882 and carry it half around the world, and place it on the market, run it through the mills and various channels of trade that lead to consumption, requires time, and gives to 1883 a plethora of wheat, in a year of low production.

Half a century ago over half the exports of agriculture were cotton. Now, cotton forms only about one-third, though the quantity is considerably increased. Then the exports of breadstuffs were but 16.8 per cent. of the exports of agriculture, and animal products 9.1 per cent. Now, and for twenty years past, the value of bread and meat products exported exceeds the value of the cotton shipped abroad in the same time. It is an extraordinary result that could not have been deemed possible a quarter of a century ago. It is due, says the Commissioner, to the progress of agriculture, the increase of immigration, the extension of railway facilities, and, in a still greater degree, to the skill in invention and enterprise and manufacture of agricultural implements. More than four billions of dollars have been received since 1865, from foreign countries for breadstuffs, and animals and their products, a few hundred millions more than for cotton exported in the same period.

"While it is gratifying to national pride to make this exhibit of surplus production, it is the settled conviction of enlightened and progressive farmers that the stimulation of excessive exportation of corn and wheat, or other raw products of agriculture, is unwise and injurious, depicting the soil, preventing the practice of rotation, and delaying a symmetrical development of rural industry. It is entering into competition with the ryots of India, the fellahs of Egypt, and the serf-labor of the world, simply to underbid them all in a market 5,000 miles from the fields of production."

The seven states which produce the surplus corn of the country from which come nearly all the commercial supplies, were quite unequally affected by the September frosts. The more Eastern suffered most heavily. Kansas has a larger stock than usual.

In March, 1881, the price in Chicago was 37 cents, when these seven states had a stock of 413,000,000 bushels remaining. But in March, 1882, after the disastrous failure of 1881, the price was 60 cents, with a stock of 200,000,000 bushels. This year the price is 53 cents at the same date, showing that the quantity in view of the poor quality of a large proportion of unmerchantable grain, must be greatly in excess of the stock of two years ago. The proportion of unmerchantable corn is twice as large as in average years. In no state is the crop of any year perfect. There is a considerable quantity of imperfect or immature growth, the result of drouth, floods, impoverished soil, bad cultivation or growth without cultivation. In Northern regions there is always some loss from frost. The proportion of merchantable in 1883, as reported, is only three-fifths of the whole, or about 936,000,000 bushels. In an average year it would have been 1,240,000,000 bushels, with the same aggregate. The extent of this disaster by frost is so sweeping that the aggregate of sound corn would not be materially lessened if all in the Northern belt of states should be counted unmerchantable. In New Hampshire, Maine, Vermont, New York, Michigan, Wisconsin, Minnesota and Dakota the merchantable amounts to only 21,000,000 bushels. If all should be called unsound, it would still leave the aggregate 915,000,000. So severe is the damage that the great corn states, Illinois, Iowa, Indiana and Ohio, which produce more than one-third of the national crop, only report 35 per cent. of sound corn.

From this statement it appears that five-sixths of all the unmerchantable corn is found north of the Ohio River and west of Pennsylvania.

The average value of the merchantable corn is placed at about 51 cents per bushel, or \$480,000,000. The unmerchantable makes an average of 27 cents per bushel, and a value of \$167,000,000. This would make the total value, at present prices, \$647,000,000.

TALLMADGE'S CROP REPORTS AND ESTIMATES.

Mr. S. W. Tallmadge, of Milwaukee, Wis., obtained in the latter part of April reports from the United States Statistical Agent and State Agricultural Department, as well as from private sources, as to the growing wheat crop, from which the following estimates are deduced: Cold and backward weather in Michigan, Indiana and Ohio has caused some anxiety in the slow growth and unhealthy appearance of the wheat plant. California is threatened with rust. The spring wheat states are backward from cold weather, and there is a decreased acreage in Iowa, Nebraska and Wisconsin, but a small increase in Minnesota and Dakota. The report of the Secretary of State of Indiana says that the crop had not progressed there as was expected during the month, on account of unseasonable cold weather, and will not make an average. Kentucky reports the acreage about the same as last year, and a promise of a fair yield. The reports from California are of hail storms and rain that will affect the early sown grain in low lands, but the percentage injured is small. Kansas reports a wheat area of 1,868,000 acres, or fourteen per cent. increase over last year, with every indication of an abundant yield. In Iowa the season is backward, although the prospects were improving, but the wheat acreage is decreased. The acreage of oats and corn has been increased; farmers there will depend this season on home-grown seed for the latter. In Nebraska the wheat acreage has been decreased fully twenty per cent.; the acreage of oats is increased to that amount, and there is also an increase in the barley area. In Minnesota seeding was progressing finely, and the area sown is from four to five per cent. greater than last year. Dakota reports that seeding was progressing rapidly, with a small increase in wheat, due to low prices, but a considerable increase in other grains.

ELEVATORS IN MANITOBA.

In our last issue (says the *North-west Farmer*, of Winnipeg) we showed the necessity of having a central storage system of elevators at Winnipeg, to form the basis of a recognized grain market for the wheat of this province. Until this is accomplished the business in our staple product will be in a crude and unsatisfactory position. We notice that our local legislature will have under consideration the passing of an act to enable municipalities to erect and operate elevators and flour mills. As this bears directly on the question we wish to indicate in what way our municipalities could best help to further this scheme in the interests of farmers.

There is a fair probability of such privileges being granted, and while we think that these bodies would go out of their sphere were they to become merchant millers, we believe that by erecting and operating elevators they would under certain conditions be of great use to the community. We recognize the necessity of having elevators erected at every railway station where grain is grown in the district in sufficient quantity to warrant such buildings. These elevators should be of minimum capacity as feeders to a central system, from which the buyers for outside markets could fill their orders.

Our idea is that municipalities should erect elevators at the station nearest to their center of cultivation, and operate these simply as a cheap and expeditious mode of forwarding the grain to the central storage system. The advantages of such an arrangement are obvious. With an elevator containing adequate cleaning and handling facilities, the farmer does not need to go through the laborious process of cleaning his grain by fanning-mills in poorly constructed barns. He can take his grain direct from thresher to elevator, and for a cost of half a cent per bushel can have it cleaned and raised to grade as rapidly as he can discharge it into the receiving hopper. The cleanings and light grains are run into sacks, and can be taken back by the farmer to his homestead to feed chickens, pigs or other animals. By such a system much time and labor can be saved to be more profitably employed in plowing and other fall work.

An intelligent man in charge of the elevator can classify the grains of small farmers so that these can go into bins or different grades. Large farmers can have arrangements whereby straight car loads can be loaded. After weighing and classification, the farmer gets the receipt of the municipal elevator for his grain, which might be sold on arrangement at the elevator, or could be forwarded to Winnipeg, or wherever the central system was located. The cost of receiving and loading the grain into cars should not exceed two cents, which would cover, say, ten days' storage. On this estimate the total cost at the handling elevator would be 2½ cents per bushel. The objection may be urged that this outlay would be a serious charge on the grain, as storage expenses would again be incurred at the central storage elevator, but it can be shown that the advantages of competition among the brokers and grain buyers at Winnipeg would secure prices which would more than cover this expense.

Past experience has shown that where individuals have erected elevators they have in most cases had a monopoly of the market at these points, and in the absence of competition have forced farmers to accept their own terms. But even where buyers at country stations have honestly paid the best they could, they have paid at least five cents per bushel less than they would pay at headquarters, where they had not the interest on buildings and other contingencies to take into consideration.

"Competition is the life of trade," and until we get keen competition for our wheat farmers will never get the best cent it is worth, but that competition must be under a system which shall secure the handling of grain in the cheapest and most expeditious manner. When we have a central storage system of elevators established, and a system of feeders in operation all over the country, we will get a central grain market established. Grain merchants and brokers will then be in a position to fill orders. Telegrams will daily report the value of wheat in every American and European market, and instead of changes of prices as at present, varying from two to five cents, bargains will turn on values representing a quarter or an eighth of that coin.

Individual grain merchants are not likely to do much in the way of elevator building during the coming season. The present is, therefore, in our opinion the proper time for municipalities to undertake the work in the interests of the farmers within their bounds.

The Canadian Pacific Railway permits the erection of elevators of 10,000 bushels capacity at every station on their line except Brandon, Portage la Prairie and Carberry. This opens up a large field for municipalities to commence operations. After careful consideration of the subject we conclude that it would be undesirable to erect an elevator of less capacity than 10,000 bushels, as the expense of smaller buildings, both in building and operating, would be relatively much greater. There can scarcely be a station near to where wheat is grown that does not now require this capacity, and which would not require increased accommodation from year to year. While the railway company allows this minimum capacity, no elevator should be erected on a completed plan. It should be erected on a plan capable of extension, as it might be required. This would tend to economy and efficiency in the long run.

The C. P. R. R. have heretofore carried material for the erection of elevators at half rates, but we are given to understand that if municipalities undertake this work the company will carry all material for construction free. This most liberal offer should do much to help the work

along, and shows the interest the company takes in this vital question. They have further stated that they will allow grain from outlying stations stored in Winnipeg elevators—if afterward sold to Eastern markets—to go out on the basis of the *through rate* from original stations of shipment. Local rates will be charged on grain going into elevators, but on the same going out to Eastern points a rebate will be given on the local freight already paid sufficient to reduce it to the equivalent of the through rate East on the distance between original shipping points and Winnipeg. This is a most important consideration, as grain forwarded to Winnipeg for sale for export is placed on the same footing in the matter of freight advantages as if it had remained stored at the home station. We trust the foregoing considerations will tend to bring the matter prominently forward so that our grain trade may be ultimately based on a practical working system.

BRITISH IMPORTS OF BREAD-STUFFS.

The British imports of flour, wheat and other grains for the first quarter of the present year are as follows, comparisons being made with the same periods of 1883 and 1882:

WHEAT.	Three months ended 31st March		
	1882.	1883.	1884.
From Russia.....	OWTS. 2,081,499	OWTS. 974,253	880,389
" Germany.....	1,038,558	1,204,815	220,450
" France.....		4,694	20
" Turkey.....	143,886	336,701	191,952
" Roumania.....		115,315	
" Egypt.....	17,868	288,124	325,079
" United States:			
On Atlantic.....	3,250,312	3,787,441	2,861,372
On Pacific.....	3,463,320	4,046,316	3,195,751
" Chile.....	339,964	204,418	67,414
" B. East Indies.....	3,553,425	1,421,709	1,894,695
" Australasia.....	170,793	49,875	256,383
" B. North America.....	29,487	44,926	1,192
" Other countries.....	22,333	280,503	256,368
Total.....	14,111,890	12,758,480	10,181,104
WHEAT MEAL AND FLOUR.			
From Germany.....	385,049	468,098	467,329
" France.....	58,519	42,821	39,323
" Aus. Territories.....	367,305	548,787	480,514
" United States.....	1,581,446	3,651,205	2,649,332
" B. North America.....	837	5,098	3,138
" Other countries.....	242,249	179,811	150,604
Total.....	2,635,405	4,895,820	3,790,240
Barley.....	3,308,278	3,566,526	2,426,239
Oats.....	1,882,832	3,178,174	2,305,381
Peas.....	229,561	524,283	445,239
Beans.....	492,251	894,823	533,135
Indian corn or maize.....	3,586,697	7,021,986	5,906,754
Indian corn meal.....	4,561	5,725	6,746

The imports of wheat and wheat flour for seven months are shown in the following:

	Quantities of Corn and Wheat Flour imported in the seven months from		
	Sept. 1 1881, to March 31, 1882.	Sept. 1, 1882, to March 31, 1883.	Sept. 1, 1883, to March 31, 1884.
Wheat.....	Qrs. 8,148,058	Qrs. 3,172,181	Qrs. 7,076,646
Wheat flour.....	1,736,122	2,905,865	2,540,458
Total wheat and flour.....	9,884,180	11,281,046	9,617,104

Of other grain, the following quantities were imported during the seven months named:

	Qrs.	Qrs.	Qrs.
Barley.....	2,418,512	3,110,996	3,039,848
Oats.....	1,958,684	3,071,200	2,553,516
Peas.....	220,299	285,347	226,986
Beans.....	217,636	357,848	337,050
Indian corn.....	2,794,128	2,505,909	3,526,588

INDIAN WHEAT.

Some interesting information about the supplies of wheat from India to Great Britain is given in a recent publication by the Indian Government of the results of inquiries it has made. The fact that will attract most attention in this country at this moment is the disclosure that the recent decline in price has checked the exports from India. In other words, the Hindoo farmer will not, any more than the American farmer, sell at prices that he regards as too low to give him a fair remuneration for his toil. Wheat stopped coming into our Western markets during the depressed prices that ruled a short time ago, and the reports of the British Board of Trade prove that, similarly, the receipts of wheat in India fell off one-fifth during the month of March as compared with the receipts of March last year.

The "spoliation of India" has done much to impoverish the ryot, but it has not made him so much of a pauper that he will sell his wheat for nothing, just for the satisfaction of underselling the American. The Indian peasant, if he cannot get a price that he thinks is a fair one, will, poor as he is, the poorest of all the cultivators of the earth, bury his wheat in earthen jars and live on millet, and rice, and other trash, until he finds the market more to his taste. Human nature is very much the same everywhere, and the Indian farmer has much the same shrewd confidence that the world must have his wheat sooner or later, as the agriculturist of Dakota.

Efforts have been made in various countries, and at various times, to ascertain what is called the "cost of production" of wheat. This is repeated in the investi-

gations under review, but they have not been more successful than others. The fact is that it is impossible to find a constant expression for a purely imaginary term, all of whose components are fluctuating. The cost of producing wheat in India, in the best lands of the north, is put at about thirty-seven cents a bushel from seeding to threshing. This allows nothing for the cost of carriage to market, or of storage. Considering the varying qualities of land, the differences in the cost of carriage, this figure cannot be taken to mean very much, but it is at least high enough to indicate that after the Hindoo wheat has been moved to the seaport and carried thence to Liverpool, it is not likely to be sold for nothing. The report puts the amount of wheat India can raise at about 300,000,000 bushels, out of which, in good years, 70,000,000 to 75,000,000 bushels can be spared for export.

These figures do not give the final truth about Indian wheat, for they do not take into account the effect that may be produced by the extension of the Indian railway system into the vast fertile plains of the north, where tens of thousands of square miles of the best wheat land lie virgin. Any one who will recall the revolution that has been produced in the markets of the world by the penetration of the rich lands of the Great West by railroads can easily conceive that startling results may follow from a similar extension of railroads in India. Without any such conversion of a wilderness into wheat farms the supply of Indian wheat is likely to be a matter of decreasing concern year by year, for Sir James Caird estimates that at the present rate of increase in population India will, in two years more, eat up all of what is now its wheat surplus, and will have none for export.—*Chicago Tribune.*

THE CHICAGO BUCKET SHOPS.

The *Chicago Tribune*, in investigating recently of the status of the "bucket shops" of our city finds them in full operation, with apparently no difficulty in obtaining the Board's quotations. Murphey's and the Metropolitan, in Gambler's Alley, and the Public Grain Exchange on La Salle street, which has a room also in the Palmer House, and is the largest bucket shop in Chicago, are under full headway. The manager of the latter stated that they were running under a temporary injunction on the telegraph company's and Board of Trade's action. The former he thought did not care to molest them, while the Board were not fighting as a body, but only a select few of the members. The only mode of checking this procuring of intelligence would be a "Chinese wall." The manager offered a large wager on the fact that people generally through the country got better treatment—and so believed—in the bucket shops than on the regular board; they are charged less, and are not compelled to risk so much.

The opinion of Judge Tuley in his late decision was referred to as settling their legal status. The Judge said that in case there is no proof that the complainant is engaged in any other than a legitimate business, the only evidence being that, "like the bucket shops, he always takes the deal or trade," this is neither more nor less than every member of the board does in every case where as broker he buys or sells on the floor of the board. "It is competition—not immorality—which the Board of Trade is seeking to put down." The opinion goes on to deny the right of the telegraph companies, as long as they have agents on the floor of the Board, to discriminate against complainants in supplying the market reports. It will be noticed that this is only a partial statement as to a temporary injunction in an individual case, while the course of the "bucket shops" is referred to by the Judge as essentially gambling, to which the case referred to is likened, but from which it is also distinguished. But the final result, when the speculative mania of the multitudes is so largely involved, is uncertain. The shops have a large capital and personal backing, and may be able, like our municipal rings, to hold on in spite of justice and law.

A RUMORED CORNER IN WHEAT.

A considerable excitement is reported to have occurred recently in the grain circles of Toledo, Ohio, based on rumors that the New York branch of the Toledo commission firm of Milmine & Bodman were running a heavy corner there on June wheat. The members of the firm, who were interviewed on 'Change, made light of the matter, and denied having any interest in the New York market. Mr. Milmine said he did not understand that there was any corner there, but that the market was very largely over-sold, and that the sellers will have to settle either with wheat or margins. He did not know the extent of these transactions, and stated that their firm were not concerned in them at all as principals. Wheat, he said, was not relatively higher in New York than in Western markets. There was, he thought, no disposition to crowd any parties there, and no cause for excitement. Other dealers, however, took a different view of matters, and claimed that the New York market was "cornered big" by the Toledo firm, who have more June wheat coming to them than the whole visible supply coming forward. These parties will eventually have to settle with the Toledo firm or deliver the wheat, and this gentleman predicted that June wheat would reach \$1.25. Another, somewhat more conservative dealer, said that he had always regarded New York as a "bear" market, and now a little Western element has stepped in, taken their property, and proposes to hold it for what it is worth, and will make the most of it to sustain the market for our Western farmers against foreign under-values. He thought, in this view, the move was commendable.

Elevator and Grain News.

Otisville, Mich., is to have a new elevator.

H. B. Marksburg, of Lancaster, Ky., is enlarging his elevator.

Dunning & Austin, grain dealers at Shelby, Neb., have dissolved.

Smith & Nicholson, grain dealers, of Imogene, Iowa, are reported failed.

The elevator at Marshall, Ind., is being renovated and the machinery repaired.

C. M. Walsworth, grain dealer and miller, Rome, N. Y., has made an assignment.

Brooks & Myles, grain dealers, of Fort Worth, Tenn., have dissolved partnership.

An elevator with storage capacity of 15,000 bushels is to be built at Algona, Iowa.

O. J. Nelson & Bro., grain dealers of Morrison, Ill., have assigned to Benj. Zeno.

The new elevator of Straubel & Ebeling, at Green Bay, Wis., is well under way.

Jacob Berns succeeds Berns, Snively & Co., stock and grain dealers at Hanover, Kan.

A. Geddes & Co. succeed A. Geddes in the grain commission business at Chicago, Ill.

Rodiger & McIntyre, grain commission merchants, of this city, have dissolved partnership.

Carter, Campbell & Co., grain dealers, of Charleston and London, Tenn., have dissolved.

Samuel Hilles & Son, flour and grain dealers, Philadelphia, Pa., have dissolved partnership.

Alfred L. Converse, flour and grain dealer, Thompson, Conn., has sold out to Marcus Coville.

McDermid & Co. succeed McDermid, Russ & Co., grain commission merchants of this city.

Linton & Gregory succeed Mills & Linton, grain commission merchants of Minneapolis, Minn.

Hepburn & Smith, in the grain commission business at Chicago, Ill., have dissolved partnership.

Two elevators of 50,000 bushels capacity each, are to be built at Devil's Lake, Dak., this summer.

R. McBurney & Sons, grain and flour commission merchants, of Philadelphia, Pa., have suspended.

Bultman, Tompkins & Co., grain and flour commission merchants, of New York City, have failed.

The immense grain trade of the Wabash Railroad is said to be under the control of one Toledo firm.

The new 100,000-bushel elevator of the Pillsbury "A" Mill, at Minneapolis, Minn., is now in operation.

It is rumored that two elevators of 50,000 bushels capacity will shortly be built at Devil's Lake, Dak.

Manitoba grain prices are still the same. The supply of wheat is but slightly in excess of the local demand.

Orrin A. Carpenter, grain merchant of Lincoln, Ill., has sold his business interest to his partner, A. Esten.

Corbett & Cormick, dealers in grain, etc., at Berkeley, Cal., have dissolved partnership. J. Cormick continues.

W. W. Huntington and L. G. Cook are about to build an elevator and storage warehouse at Minneapolis, Minn.

Hallam & Applegate, grain commission merchants of this city, have dissolved, and are succeeded by Hallam & Co.

O. Wheeler has retired from the firm of William B. Wheeler & Co., grain commission merchants, New York City.

Book & Gilmore, proprietors of a grain warehouse at Los Angeles, Cal., have dissolved. F. J. Gilmore succeeds.

Lowry Bros., grain and lumber dealers, of Walker Mo., have sold out their lumber business to J. Whitesides.

The farmers in the vicinity of Valley Springs, Dak., sold last year over 80,000 bushels of flaxseed, valued at \$38,000.

The Crookston Roller Mill Co., Crookston, Minn., are about to build an elevator in connection with their mill.

Smith, Tuttle & Co., succeed Smith, Murdock & Co., grain dealers at Oswego, N. Y., who have dissolved partnership.

H. G. Page, of Fergus Falls, Minn., intends to erect a 100,000-bushel elevator in connection with his mill at that place.

The Sterrett Elevator Co., who have formerly made St. Paul, Minn., their headquarters, are about to move to Minneapolis.

W. R. Beebe & Co., flour and grain dealers, Kalamazoo, Mich., have dissolved partnership, and are succeeded by Morgan Cloney.

The foundations are laid for the new elevator which is being built at Minneapolis, Minn., by the Minneapolis Elevator Co.

Articles of incorporation have been filed by the Toledo & Michigan Elevator Co., at Toledo, Ohio. The capital stock is \$250,000.

The Elevating Co., of Montreal, Canada, has decided to abolish the twenty per cent. discount hitherto allowed to the trade for elevating grain. They will add a charge of fifty cents for duplicate copies of grain transferred.

The forwarding companies have objected to the increase, and threatened to send to other ports for floating elevators to do their work.

The elevator at Amenla, Dak., has a capacity of about 125,000 bushels, and handles about 300,000 bushels during the season.

Weisbach & Roper, grain and feed dealers, of New Tacoma, Washington territory, have dissolved. J. J. Roper continues.

E. L. Drewry, of the Redwood Brewery, Winnipeg, Manitoba, purposes building a 50,000-bushel elevator to handle barley only.

Hildersheimer & Walker, flour and grain dealers, San Antonio, Tex., have dissolved, and are succeeded by D. Hildersheimer.

The Sterrett Elevator Co.'s elevator at Ada, Minn., which was burned recently, is about to be replaced with a much larger one.

Lanterman & Stewart, grain dealers and millers, of Grayville, Ill., failed May 10. Their liabilities were \$50,000, with \$25,000 assets.

C. W. Seefeld, of St. Charles, Minn., has purchased of F. D. Livermore, Rochester, Minn., four engines and boilers for elevators in Dakota.

Elias Cockrell has sold out his elevator at Medora, Ill., to Lee & Schofield. He has also sold his grain business at Jerseyville, Ill., to J. Valentine.

William Penrose and William H. Beastall have been admitted to the firm of Penrose, Nelker & Co., grain commission merchants, Baltimore, Md.

William Hewer, flour and grain dealer, New York City, has admitted W. T. Marvin to partnership, and the firm name is W. T. Marvin & Co.

The liabilities of Buttman, Tomkins & Co., grain merchants of New York City, who made an assignment on May 7, are \$73,000; actual assets \$15,000.

L. C. Barnett will erect a 30,000-bushel round elevator on Antelope farm, west of Wahpeton, Dak. Work will be commenced the latter part of this month.

M. D. Lane has retired from the firm of Hubbard & Co., grain commission merchants at Kansas City, Mo., L. M. Hubbard succeeds under the old style.

Some of the victims of L. C. Thompson, who has been running a bucket-shop at Decatur, Ill., are trying to secure his arrest. He is not to be found, however.

The Advance Elevator Co., St. Louis, Mo., are about to build a 500,000-bushel elevator, which they will run in connection with their elevator in East St. Louis.

Ballard & Ballard, Louisville, Ky., large millers and grain dealers, failed May 6. Their liabilities were estimated at \$160,000, and their assets are but nominal.

There is a movement on foot in Winnipeg, Manitoba, to form a stock company for the purpose of erecting a 500,000-bushel elevator at that place, to cost \$100,000.

Field, Lindley & Co., grain commission merchants, of New York City, have renewed their limited partnership to April 30, 1889, with a specified capital of \$25,000.

The foundation of Straubel & Ebeling's elevator at Green Bay, Wis., a very massive piece of work, is nearly all laid, and work on the building will soon commence.

The two grain commission firms, Jas. M. Love & Co. and Wm. E. Love & Co., of this city, have consolidated, and will do business under the style of Love Bros. & Co.

F. W. Simonds, grain exporter and commission merchant, of New York City, has admitted Henry A. Simonds to partnership, under the style of F. W. Simonds & Son.

F. B. Howell & Co., grain and stock brokers, New York City, have dissolved. M. C. Howell will continue the grain and produce business, and F. B. Howell the stock brokerage.

Pillsbury & Hulbert contemplate building an addition to their elevator at Larimore, Dak., which will add 30,000 bushels to its capacity, making it an 80,000-bushel elevator.

The Board of Trade of Kansas City, Mo., has a membership of 200. The estimated value of memberships is now \$400, and the finances of the Board are in a healthy condition.

The exports of Indian wheat to England have risen from 8,477,479 cwt. in 1882 to 11,243,497 cwt. in 1883, and to 19,500,000 cwt. in the first ten months of the current financial year.

The grain trade prospects in Bulgaria are very discouraging, the low prices of last season having had a depressing effect, and there is great agricultural and commercial stagnation.

The Valley Grain Elevator Co., of St. Clair Co., Ill., has been incorporated, with a capital stock of \$260,000. John W. Lorrimer, Hugh Rogers and Charles F. Orthwein are the incorporators.

The partnership heretofore existing between Van Valer, Warner & Co., grain and flour commission merchants, New York City, has been dissolved. Warner & Wyman continue the business.

H. Roberts, Jr., who in February last purchased the elevator of H. L. Fuller, at Waterman, Ill., will this season pay strict attention to the grain business. This elevator has a capacity of 20,000 bushels.

The "Pearl River Oil Mill" at Jackson, Miss., shipped on April 24 its first 100 tons of pre-ared cotton seed to Liverpool, Eng., thus opening a new export business.

The mill, after experimenting all winter, has just per-

fect a process for removing all the lint from the seed and is now running night and day. This process will bring the American seed in competition with that of Egypt in the English mills, and it is thought will cause a revolution in the oil-mill business.

Cowling & Parker, commission merchants of Chicago, Ill., have suspended. Their liabilities are said not to be large. They attribute their suspension to the failure of their customers, mainly in Louisville, Ky., to pay their margins.

The Frost Mfg. Co., Galesburg, Ill., are supplying Geo. Marks & Co.'s new elevator at Hastings, Neb., with a twenty-horse-power engine and a twenty-five-horse power boiler, with all the necessary pulleys, shafting, boots, cups, belting, etc.

Dean Bros.' Steam Pump Works, Indianapolis, Ind., have furnished the Ruste-Owen Lumber Co., of Drummond, Wis., a system of water-works, including pumping machinery, pipe and hydrants, having a capacity of 1,000,000 gallons in twenty-four hours.

Caldwell's Conveyor has lately been shipped to the following points: Pittsford, N. Y.; Dundee, Ill.; Milwaukee, Wis.; Providence, R. I.; Marshalltown, Iowa; Bedford, Ohio; Leon, Wis.; Pendleton, Ind.; Columbus, Ind.; Sedalia, Mo.; Brandon, Wis.; Grand Rapids, Mich.; Thielmantown, Minn.; Minneapolis, Minn.; Cutler, Ill.; Quincy, Mich.; Plain City, Ohio; Northville, Ill.; Elkhart, Ind.; Chillicothe, Mo.; Washington, Ind.; Clinton, Ind.; Golden, Colo.; Green Bay, Wis.; Salem, Ohio; Palmerston, Ont.; Bellefontaine, Ohio; Columbus, Ohio; New London, Iowa; Sioux City, Iowa; Deloro, Ont.; Topeka, Kan.; Constantine, Mich.; Hopkinsville, Ky.; Cumberland, Md.; Louisville, Ky.; Baltimore, Md.; Abilene, Kan.; Spencer, Ill.; Granville, Mich.; Memphis, Tenn.; Rock Falls, Ill.; Portland, Ore.; Great Bend, Kan.; Irvington, Ill.; Detroit, Mich.; Millstadt, Ill.; Philadelphia, Pa.; Danville, Ill.; St. Louis, Mo.; Royal Oak, Mich.; Geneva, Ill.; Tyrone, Pa.; Rockford, Ill.; St. Mary's, Ohio; Burkhardt, Wis.; Moawequa, Ill.; LaMars, Iowa; Moline, Ill.; Camptown, Pa.; Riverton, Ill.; Brooklyn, N. Y.; Savannah, Ga.; Hunt's Station, Tenn.; Cardington, Ohio; Davenport, Iowa; Unadilla, N. Y.; Oconomowoc, Wis.; Franklin, Ky.; Corning, Iowa; Joliet, Ill.; Denver, Col.; Foute, Iowa; Kansas City, Mo.; Woodbine, Iowa; Wichita, Kan.; Moberg, Mich.; Sage Town, Ill.; Enterprise, Kan.; Pine Bluff, Ark.; Midland City, Mich.; Centerville, Iowa; Mishawaka, Ind.; Eau Claire, Wis.; Edwardsville, Ill.; Three Rivers, Mich.; Napanee, Can.; Crook City, D. T.; Grand Haven, Mich.; Watertown, Wis.; Chickasaw, Iowa; La Porte, Ind.; Hancock, N. Y.; Shelby, Ohio; Salem, N. C.; St. Charles, Ill.; Boston, Mass.; Olney, Ill.; Watertown, Wis.; Fayetteville, N. C. These shipments have been made from Chicago, and do not include shipments from Pittsburgh or St. Louis.

PRICES OF CORN AT CHICAGO.

Opening, highest, lowest and closing cash prices of No. 2 Corn, per bushel, on the Chicago Board of Trade each month of the years indicated, as reported by the Chicago Daily Commercial Bulletin:

	1881.	Opening.	Highest.	Lowest.	Closing.
January, 1881.....	37	37 1/2	38	37	37
February.....	36 1/2	38 1/2	38 1/2	38 1/2	38 1/2
March.....	38	41 1/2	38	40 1/2	40 1/2
April.....	40 1/2	44	40 1/2	44	44
May.....	42 1/2	45	41 1/2	42	42
June.....	42	48	42	45 1/2	45 1/2
July.....	45 1/2	50 1/2	45 1/2	49	49
August.....	49 1/2	63 1/2	49 1/2	62 1/2	62 1/2
September.....	62 1/2	63	60 1/2	71 1/2	71 1/2
October.....	74	76 1/2	59 1/2	62 1/2	62 1/2
November.....	63 1/2	63 1/2	57 1/2	59 1/2	59 1/2
December.....	60	63 1/2	58 1/2	63 1/2	63 1/2
1882.					
January, 1882.....	63	63 1/2	60 1/2	60 1/2	60 1/2
February.....	60 1/2	60 1/2	56 1/2	58 1/2	58 1/2
March.....	60	68 1/2	59 1/2	68 1/2	68 1/2
April.....	69 1/2	77 1/2	60 1/2	71 1/2	71 1/2
May.....	70 1/2	76 1/2	69	69 1/2	69 1/2
June.....	69	75	68 1/2	75	75
July.....	74 1/2	81 1/2	74 1/2	79	79
August, cash.....	75 1/2	79 1/2	74 1/2	74 1/2	74 1/2
do. seller Oct.....	73 1/2	77 1/2	72 1/2	73 1/2	73 1/2
September, cash.....	74	75	57 1/2	58	58
do. seller Nov.....	67	69	57 1/2	58 1/2	58 1/2
October, cash.....	59	71 1/2	59	67	67
do. seller Dec.....	54	64 1/2	54	60 1/2	60 1/2
November, cash.....	67 1/2	72 1/2	64	65 1/2	65 1/2
do. seller Jan.....	61 1/2	63 1/2	52 1/2	53 1/2	53 1/2
December, cash.....	61	61	49 1/2	49 1/2	49 1/2
do. seller Feb.....	52 1/2	53 1/2	48 1/2	50 1/2	50 1/2
1883.					
January, cash.....	49 1/2	70	49 1/2	56	56
do. seller May.....	53	59 1/2	53	57 1/2	57 1/2
February, cash.....	54 1/2	59	54 1/2	57 1/2	57 1/2
do. seller May.....	57 1/2	63 1/2	57 1/2	61 1/2	61 1/2
March, cash.....	57 1/2	59 1/2	52 1/2	54 1/2	54 1/2
do. seller May.....	61 1/2	63 1/2	55 1/2	56 1/2	56 1/2
April, cash.....	55 1/2	59 1/2	55 1/2	55 1/2	55 1/2
do. seller June.....	57	58 1/2	52 1/2	57 1/2	57 1/2
May, cash.....	55 1/2	56 1/2	53 1/2	56 1/2	56 1/2
do. seller July.....	59 1/2	60	56 1/2	57 1/2	57 1/2
June, cash.....	56	57 1/2	50 1/2	50 1/2	50 1/2
do. seller Aug.....	58 1/2	59 1/2	50 1/2	52 1/2	52 1/2
July, cash.....	48 1/2	53	47 1/2	50 1/2	50 1/2
do. seller Sept.....	52 1/2	52 1/2	48 1/2	50 1/2	50 1/2
August, cash.....	50	56 1/2	49 1/2	50 1/2	50 1/2
do. seller Oct.....	50	51	48 1/2	49 1/2	49 1/2
September, cash.....	49	52 1/2	47 1/2	48 1/2	48 1/2
do. seller Nov.....	47 1/2	52 1/2	46 1/2	48 1/2	48 1/2
October, cash.....	49 1/2	49 1/2	46 1/2	46 1/2	46 1/2
do. seller Dec.....	47 1/2	47 1/2	46 1/2	46 1/2	46 1/2
November, cash.....	47 1/2	57	47 1/2	55 1/2	55 1/2
do. seller Jan.....	45 1/2	55 1/2	45 1/2	54 1/2	54 1/2
December, cash.....	54 1/2	62 1/2	54 1/2	55 1/2	55 1/2
do. seller Feb.....	54 1/2	61 1/2	53 1/2	55 1/2	55 1/2
1884.					
January, cash.....	54 1/2	57 1/2	51	52 1/2	52 1/2
do. May.....	52 1/2	61 1/2	56 1/2	57 1/2	57 1/2
February, cash.....	52	55	52	53 1/2	53 1/2
do. May.....	57 1/2	61 1/2	57 1/2	57 1/2	57 1/2
March, cash.....	53 1/2	54 1/2	49 1/2	54 1/2	54 1/2
do. May.....	57	57 1/2	53 1/2	56 1/2	56 1/2

Fires, Casualties, Etc.

Walter B. Allen, grain dealer, Ogdensburg, N. Y., died recently.

P. A. McDougald, grain dealer at Oakville, Ont., Canada, is dead.

John Seebeck, warehouseman, Mountain View, Cal., died recently.

J. L. Davis, grain dealer of Cleburne, Tex., has been burned out. Insured.

H. S. Remington, grain dealer, Providence, R. I., was recently robbed of \$2,800.

The death is announced of J. G. Dillon, of the firm of J. M. Sewell & Co., grain dealers of Juniata, Neb.

The elevator at Auburn, N. Y., situated at the foot of the Big Dam, was burned April 15. Loss, \$15,000, which was insured.

The elevator of Sterrett, Hill & Child, at Ada, Minn., burned early in the morning of April 20, with 5,000 or 6,000 bushels of wheat.

W. C. Murphy was fatally injured on May 2, by being caught in the machinery of the elevator of A. L. Spencer & Co., of Oskaloosa, Iowa.

J. W. Egan & Co., grain commission merchants, Philadelphia, Pa., have been damaged by fire to the extent of \$1,000, which was insured.

Edwin Rice, of Paxton, Ill., a leading grain dealer died May 1. He had been connected with the business of the city for seventeen years.

M. F. Gonzales, grain commission dealer, Pensacola, Fla., has been burned out. The loss was estimated at \$15,000, with \$11,000 insurance.

Wm. Morin's warehouse at Hartland, Minn., was burned recently, with about 600 bushels of wheat. The entire loss was nearly \$1,000. There was no insurance.

A young man employed in the glucose works at Iowa City, Iowa, was caught in the machinery on April 29, while putting on a belt, and had his limbs broken and body badly bruised.

A fire occurred at Elkport, Iowa, at 2 A. M. on April 23, entirely destroying Garber & Sons' large warehouse with 500 bushels of grain, a lot of agricultural machinery, forty cords of wood and one box car. There was no insurance. The C. M. & St. P. depot was scorched.

A. A. Robertson, a grain buyer, committed suicide, recently, in a hotel at Hampton, Iowa, by shooting himself through the brain. His wife was in the dining room at the time. He was suffering from an army wound; it was rumored that he had suffered heavy losses lately from speculation.

Capt. John Zedeck, a prominent grain dealer, of Mountain View, Cal., committed suicide at San Jose recently, by shooting himself through the head with a revolver. The deed was done in the presence of his wife, with whom he had just returned from a trip. He leaves two sons and two daughters. No cause was assigned for the deed although it was supposed financial embarrassment may have had something to do with it.

The stone elevator of McEwen Bros., at Morris, Ill., was burned, with all its contents, on April 24. The building and machinery, valued at \$12,000, were owned by Jeremiah Collins. The grain was owned by Marevey & Hansen, whose loss was about \$2,000. The insurance on building had expired. Fire was also communicated to the warehouse of Geo. F. Brown, which was consumed with its contents. The building owned by Michael Cryder, and the grain, owned by Canal Commissioner Brown, were insured for \$2,000 each.

THE MINNEAPOLIS CHAMBER OF COMMERCE.

The Minneapolis Chamber of Commerce, just completed, is a beautiful and magnificent structure, and is an honor to this great center of the milling industry of the world, as well as our own country. The contract for this building was made in April 2, 1883, by the directors with F. A. Fisher & Co., of Minneapolis, Minn., to erect a building in accordance with the specified plans, to be completed, ready for occupancy, on May 1, 1884. The work was commenced on April 12, 1883, and the walls were up and the building inclosed on Jan. 1.

The building is 90x150 feet four stories and a high basement, built of brick, with the fronts on Third street and Fourth avenue south, built of cut Ohio sandstone. All the partitions are brick.

The Chamber proper is 50x90 feet, occupying three stories in the rear of building. There are three offices for the use of the Chamber, and sixty-two commodious rooms for rent as business offices, with one banking room. This building is considered to be one of the finest in the Northwest, and superior, it is claimed, to any other designed for that purpose. It is fitted up with all the modern appliances of use and comfort, such as elevator, steam heat, etc., and has broad, well-lighted corridors, and fire-proof vaults. Open grates, with marble trimmings, are in all the offices, which are well lighted with gas, supplied with electric lighting wires. The tenants of surplus room are all first-class, and are connected with the grain and milling business.

The cost of building, complete, outside and in, with paving, sewerage, water mains, etc., was about \$175,000

—the lots being a donation—and the present cash value is estimated at fully \$235,000. The funds have been raised by membership fees, which were set apart from the first for a building fund; also fees received for the transfer of seats. An assessment of \$65 per membership was levied in April, 1883, netting \$35,000, making a total of \$50,000. Bonds of the corporation—five per cents.—for \$100,000 have been issued, and brought the same rate as six per cent. bonds, netting \$92,000 and aggregating \$142,560. To meet the balance, an assessment was made, to be paid on the completion of building. Says our contemporary, the *Northwestern Miller*: "In two and one-half years from the date of its organization, this Chamber of Commerce has grown from a weak corporation, with but a score of members and a few hundred dollars in its treasury, to be the strongest commercial organization in the Northwest."

Late Patents.

Issued on April 15, 1884.

ROLLER CHAIN.—Henry A. Church, Providence, R. I. (No model.) No. 296,925. Filed Jan. 2, 1884.

MACHINE FOR DOUBLE SEAMING ELEVATOR BUCKETS.—Charles J. Williams, Milwaukee, Wis., assignor of one-half to John C. Iverson, same place. (No model.) No. 297,048. Filed February 18, 1884.

ELBOW FOR SPOUTING.—Daniel B. Rock, Fairfield, Pa. (No model.) No. 296,786. Filed Oct. 29, 1883.

Issued on April 22, 1884.

CANAL BOAT.—Angus McDonald, Ausable, Mich. (No model.) No. 297,279. Filed Feb. 6, 1884.

DRIVE CHAIN.—William Dana Ewart, Chicago, Ill., assignor to the Ewart Manufacturing Co., same place. (Model.) No. 297,362. Filed Feb. 29, 1884.

DRIVE CHAIN.—Dennis D. McKernan, Chicago, Ill. (Model.) No. 297,149. Filed Aug. 30, 1883.

CORN SHELTER.—Harvey Packer, Rock Falls, assignor to Thomas A. Galt and George S. Tracy, both of Sterling, Ill. (No model.) No. 297,288. Filed Jan. 2, 1884.

FANNING MILL.—William H. Kelly, Lexington, Va. (No model.) No. 297,411. Filed Oct. 26, 1883.

DRIVING GEAR.—Fleeming Jenkin, Edinburgh, Scotland. (No model.) No. 297,407. Filed July 12, 1883. Patented in England April 14, 1883, No. 1,913; in France May 21, 1883, No. 155,568; in Austria Aug. 16, 1883, No. 20,212; and in Belgium Dec 10, 1883, No. 63,486.

Issued on April 29, 1884.

DRIVE CHAIN.—Theodore F. Hall, Marietta, Ohio, assignor, by direct and mesne assignments, of part to Alfred J. Richards, W. E. Conner and George W. Lovell, all of same place. (Model.) No. 297,793. Filed Oct. 9, 1882.

ELEVATOR BUCKET.—Charles W. Hunt, New York, N. Y. (No model.) No. 297,934. Filed March 15, 1884.

AUTOMATIC GRAIN METER.—George Marsh and Vinde Arnold, Marshall, Mich. (No model.) No. 297,614. Filed Feb. 15, 1884.

HORSE POWER.—John T. McCarney, Columbus Junction, Iowa. (No model.) No. 297,825. Filed Feb. 26, 1884.

Issued on May 6, 1884.

MACHINE BELT HOLDER.—William R. Santley, Wellington, Ohio. (No model.) No. 298,238. Filed Oct. 5, 1883.

GRAIN SEPARATOR.—Edward Huber and Frederick Strobel, Marion, Ohio. (No model.) No. 298,302. Filed Feb. 8, 1883.

THE WORLD'S WHEAT PRODUCTION.

The following is an approximation of the average annual wheat production of the United States, Canada, Europe and other countries, represented in quarters and bushels:

	Quarters.	Bushels.
United States.....	60,000,000	480,000,000
Canada.....	5,000,000	40,000,000
France.....	3,500,000	28,000,000
Russia.....	25,000,000	200,000,000
Italy.....	17,500,000	140,000,000
Spain.....	14,500,000	116,000,000
Germany.....	12,000,000	96,000,000
Austria and Hungary.....	13,500,000	108,000,000
United Kingdom.....	11,900,000	95,200,000
Turkey in Europe.....	5,000,000	40,000,000
Rumania.....	4,250,000	34,000,000
Belgium.....	3,000,000	24,000,000
Holland.....	750,000	6,000,000
Portugal.....	1,100,000	8,800,000
Greece.....	600,000	4,800,000
Servia.....	550,000	4,400,000
Denmark.....	575,000	4,600,000
Sweden.....	600,000	4,800,000
Switzerland.....	275,000	2,200,000
Algeria.....	4,000,000	32,000,000
Egypt.....	2,000,000	16,000,000
Australia.....	3,000,000	24,000,000
New Zealand.....	1,000,000	8,000,000
India.....	30,000,000	240,000,000
Chili, Argentine Republic, etc.....	3,000,000	24,000,000
Total.....	258,500,000	2,028,000,000

The Todds & Stanley Mill Furnishing Co., St. Louis, Mo., have just taken out drag chain from a warehouse at that point, and put in its place nearly 2,000 feet of twelve-inch Caldwell Steel Conveyor, furnished by H. W. Caldwell, of this city.

The Trade.

Skinner & Wood, of Erie, Pa., have opened a sales-room at 45 Dey street, New York City, where they will carry a full line of their engines and boilers for their Eastern and export trade. They have issued a new catalogue of their goods, which is neatly printed and profusely illustrated.

The Pond Engineering Co., of St. Louis, Mo., report an increased business in their Jarvis Patent Furnaces for setting boilers. They have received orders as follows: To set two boilers for Swancoat & Burns, Austin, Tex.; two for the Merchants' Electric Light and Power Co., Danville, Ill., and one each for Charles Pigler, Sumter, Minn., and E. W. Bennett, Mechanicsburg, Ill.

Dean Bros' Steam Pump Works, Indianapolis, Ind., have orders for supplying distilleries with the vacuum apparatus required for manufacturing spirits by the Woolner *et al.* Patent Process. These orders require seven large, independent vacuum pumps, also twelve beer and mash pumps, with Composition Cylinders. This system increases largely the yield of spirits, and does away with the old "mash tubs."

The Great Western Mfg. Co., Leavenworth, Kan., have, in addition to their regular mill furnishing business, been putting up a large number of elevators during the past season. Among others may be mentioned Roach Bros., Clyde, Kan.; Thornton Bros., Gen., Kan.; L. D. Harter, Oneida, Kan.; Wetmore Grain Co., Wetmore, Kan.; J. E. Fowler, McLouth, Kan.; Mankato Elevator Co., Mankato, Kan.; Speer & Hubbard, Baker, Kan.; Clark Decker, Greeley, Kan.; J. C. Mohrman & Co., Syracuse, Neb.; Tewksberry & Cooper, Weeping Water, Neb.; Henry Metz, Tonganoxie, Kan.

In reviewing the industries of Springfield, Ohio, the *Merchant and Manufacturer*, of Cincinnati, has the following paragraph: "The Bookwalter Engine, manufactured by this live firm, has somewhat revolutionized the engine business, and is rapidly growing in popular favor. Since its introduction to the public, about ten years ago, its success has been unprecedented in the history of cognant manufactures, and the amount of good it has done for various manufacturers scattered broadcast over the land can be counted by millions. Its simplicity of construction, general utility, and splendid working powers are such as to commend it to the thoughtful consideration of all who desire a serviceable, cheap, and economic engine."

A NEW CHICAGO TRANSFER ELEVATOR.

An elevator is being erected at the corner of State and Sixty-third street, Chicago, Ill., for the Lake Shore Road and Richards, Maynard & Co., for weighing and transferring bulk grain. The building is 40x190 feet, and fifty feet high. At the south end is an inclined approach about 800 feet long, built on piling, on which are two tracks, over which loaded cars will pass to the elevated tracks in the house. Hopper scales are arranged between the tracks in the building, so that each car, when in position, can receive or discharge its load. Each scale is of 48,000 pounds capacity. The cars are unloaded simultaneously by a line of steam shovels directly into the hoppers, where the grain is weighed and spouted into the cars below, to which the transfer is to be made, without the necessity for handling. The car is then sealed and is ready to be forwarded to its destination. The capacity of the new elevator will be 200 cars per day, and it will be completed about the middle of May. This building is the result of the protracted controversy last year between the roads and shippers relative to weighing and transferring East-bound grain. A general transfer elevator was then talked of, and \$100,000 were offered by prominent shippers for the purpose. The Lake Shore finally adopted the substantial and convenient plan as above.

A correspondent of the *Industrial South*, writing from Newport News, Va., says: "One of the most important factors in the prosperity of this place is its enormous grain elevator. Of this mammoth building so much has been said as to leave but little to be added. With one exception—that of Milwaukee, which has a capacity of 1,800,000 bushels—it is the largest in the world, its capacity being 1,600,000 bushels. Its length is 368 feet, height 200 feet, and width 90 feet. Its engine-room is 36x96 feet. It has two longitudinal beltways 850 feet each, and one cross beltway 150 feet. It is covered without and lined within—'sheathed,' as the builders say—with *kalmained* iron, the superiority of which to galvanized iron is commending it to public favor, both in this country and in Europe. It has a wharf 850 feet long, with 30 feet depth of water, and facilities for loading four vessels at once. To the timber of which it is built, nearly every state on the Atlantic coast, from Maine to Florida, has contributed, Virginia furnishing a large quota of oak and pine. This vast establishment is owned by the Chesapeake and Ohio Grain Elevator Company, the leading spirits of which are such enterprising capitalists as C. F. Huntington and James M. Hazeltine, of New York. It will cost when completed about one million of dollars. It may interest your readers to know that the general foreman and assistant engineer is Mr. C. L. Sears, now of New York, but a native of Virginia, to whose courteous attention I am indebted for a pleasant ramble through the various apartments of this grand building."

Notes from the Exchanges.

The Board of Trade of Belleville, Ont., was organized on May 3, and will appoint a grain inspector, and take other measures for the increase of the trade of that city.

The Board of Directors of the Merchants' Exchange, St. Louis, Mo., has adopted a resolution in favor of a single session of the Exchange daily from 9:30 A. M. to 2:30 P. M., and to confer with other exchanges on the subject. The directors have also decided to propose the question to the vote of the Exchange, whether they shall submit to the demand of the Chicago Board of Trade that the market quotations received from the latter shall not be given to the bucket-shops of St. Louis. A vote was to have been taken May 13.

The blanks of applications for the new market reports from the Chicago Board of Trade have been prepared with the most stringent provisions against the reports falling into the hands of the bucket-shops. The applicant must expressly agree that such reports shall not be used by him as a basis for trading or dealing in or on such quotations or the differences in such quotations, reported from time to time; and that such reports shall not be transmitted or communicated to any other person, firm, or corporation, to be so used, and that such reports shall not by his consent be in any way used for the promotion of the business commonly known as the "Bucket-Shops." In case the Board discovers that the reports are being used contrary to the provisions of the application it reserves the right to discontinue sending the quotations without notice. The applicant must also give Chicago references before his application will be considered.

A gentleman in New York state, who has a brother residing in this city, recently received a circular issued by S. H. Woods, No. 22 Chamber of Commerce, Chicago, Ill. He proposes to organize a corner in June wheat of such vast dimensions that investors will make large fortunes. It is of the Flemming & Merriam complexion. A reporter of the *Inter-Ocean* found the above number to be the office of Wm. C. Duell & Co., well-known members of the Board of Trade. They said that Mr. Woods was a young man, resident of Minneapolis, who was often in Chicago, had a chair in their office, and made deals frequently on orders from his partner through their firm, but had never been known to make trades for himself, or to be implicated in any questionable transactions. It was said that Mr. Woods was a trifle visionary, and this circular warrants that mild conclusion. He was expected in a day or two in the city, and would then speak for himself.

The formal opening of the new building of the New York Produce Exchange, after a grand frolic at the old resort, occurred on May 6. At the old home addresses were made by President Herrick and James McGee, with a parting song from the glee club. At least 4,000 persons, including a large number of ladies, gathered in the main room of the new structure. On the platform were seated Mayor Edson, Chauncey M. Depew, Ald. Sullivan, President Herrick, Vice-President David A. Lindley, ex-President Lyman F. Holman, A. Pagensteher, J. L. Stark, Alexander E. Orr, James H. Pool, Alexander Munn, E. R. Livermore, Samuel Jacoby, James Hoyt, T. A. McIntyre, H. O. Armour, and several invited guests from out of town. Mayor Edson, as chairman of the Building Committee, presented to the President the fine new structure in a very felicitous address, which was followed by Mr. Chauncey Depew, who spoke of the erection of this magnificent trade edifice as marking an era in our national development, showing the vast growth of our industries and mercantile transactions. Commerce was shown by the history of the world to be the grandest force for conserving liberty and law, and for developing and protecting Christian civilization. This truth the speaker fully illustrated. Mr. Depew presented a rapid review of the facts and figures showing the enormous increase of our cereal productions in the past few years, indicating that the markets of Europe will soon be ours unless American merchants create obstacles by illegitimate practices, such as gambling in food products. While presenting some of the injurious results already caused by excessive speculation, he remarked: "The Produce Exchange stands in a position to keep trade in its legitimate channels." Mr. Algernon S. Sullivan then gave a congratulatory address, followed by other short addresses from representatives of trade associations elsewhere. A member of the Chicago Board of Trade, Mr. Blake, in a few dignified but earnest words, replied to the intimations in Mr. Depew's address, to the effect that the Chicago dealers were gamblers. He said: "We repudiate the charge. Our interests are your interests; our words come to you over the wires, and when we gamble you help us; when we lose you pay our debts; when we make money you pocket a share of the profits."

The Chicago Grain, Provision, and Stock Board, known generally by the name of "Call Board," held its last annual meeting on May 13, and, as had been anticipated, committed suicide by unanimous consent, with some accompanying turbulence, however, it being determined by the "boys" that its finale should be memorable. The report of the directors indicated no loss of interest in the afternoon "Call," which gave origin to the special system of trading that has been adopted at all the great grain centers. The secretary reported that the total of the operations of last year was \$342,256,693, against \$345,738,592 in 1883, and \$565,749,787 in 1882. The total receipts had been \$120,183, the main item of which was

\$98,791 realized on seats. A cash dividend of \$50,250 had been declared early in the year, and \$25,000 had been invested in Board of Trade bonds. President Chittenden called attention to the petition for an adjournment from May 1 to Nov. 1, signed by a majority of the membership. Geo. J. Brine offered as a substitute a resolution instructing the directors to discontinue the regular daily meeting of the board, and to wind up its affairs forthwith, thus dissolving the corporation. At least 200 seconds greeted this motion. The question of Asa Dow, as to the reason for this move, was laconically answered: "It's a nuisance; we are tired of it." With but slight opposition the motion was carried almost unanimously, not over twenty-five voting in the negative. The Call Board was organized through the influence of H. B. Hutchinson—"Old Hutch"—eight years ago, for the benefit of pork packers, and for about five years provisions only were handled. When the "call" system had become generally popular, some two years ago, the grain call was inaugurated, under a strong opposition on the part of many grain men, who were, however, forced to go there, *volens volens*, by the demands of customers who were obtaining knowledge of the prices. The operation known as "changing," that is, buying in one month and selling in another, which is readily and instantaneously done on the regular board, was impracticable on the "Call," where months were sold only consecutively. This may have been an inconvenience that aided in its dissolution. The discontent became apparent about nine months ago, growing out of the movement for an independent organization, after entering its quarters in the Board of Trade building. There was a strong antagonism to the movement, which resulted in the distribution of \$150,000 among the 1,000 members. The large membership produced serious competition and cutting of futures; while many commission men felt that the "call" was detrimental to their interests. The price of membership, a year ago, was \$550, one sale being reported at \$600; and it was then expected that it would reach \$1,000. They were offered before the meeting at \$15, but have since been shown to be worth \$20. Various opinions on this matter have been expressed by leading men. Mr. Jno. R. Bensley thought the afternoon call advisable, on various trade grounds. Geo. J. Brine favored an afternoon session of the regular board. Chas. E. Culver favored a longer morning session, closing at 1:30 or 2 P. M., to which quite a number agreed, mostly favoring the latter hour. This question was taken up at a meeting of the Board of Trade Directors, and after full discussion a committee was appointed to confer with the Directors of the Call Board in regard to opening another call at the old place until the new building was completed. President Blake expressed himself strongly in favor of an afternoon call, as patrons would force trading then on the commission men in any case, and much illegitimate trade would result. A special meeting of the directors was appointed.

KEENE AS A WHEAT SPECULATOR.

The San Francisco *Chronicle* of May 2, says: When James R. Keene left this city, at the close of 1876, he was worth \$7,000,000, according to his own estimate, which was most likely a correct one. But he reached the whole of this immense fortune during the seven years immediately preceding, through his well-known arts and devices as a mining stock manipulator, or, in other words, by milking California street, and through California street a large section of the public, as the process was usually termed in that unhappy period of our history. In changing, however, the field of his operations, he carried with him some recently gained experience as a wheat speculator, and to this circumstance may, perhaps, be attributed his first serious losses in New York, and his ultimate downfall.

In the early part of 1876, Keene, after having been duly indoctrinated into the art and mystery of wheat speculation under the able tutelage of the genial Tom Edmondson, a well-known *habitué* of the Union Club of this city, who subsequently followed his patron and apt pupil to New York, first tried his "prentice hand" at a tonnage corner in connection with the late Isaac Friedlander, the pioneer ship-broker and great mogul of the California wheat market at that time. But the joint speculation, although on a large scale, failed to control the market and had little in its favor beyond the prestige of its promoters. A freight ring, to be successful, must, in addition to a big crop, be a full-blown monopoly or have all the leading operators working on the side of ships instead of in opposite directions. This, however, was not the case in 1876, and so the farmers won an easy victory. Keene's blunder on that occasion was in not seeing that in chartering vessels at £3 10 he was shorting wheat at \$1.50 a cental, which, as matters then stood, was an exceedingly reckless operation. But he discovered his mistake in time to save himself, and dexterously changing his interests from ships to wheat, not only made good his losses, but, it is believed, came out sufficiently ahead to defray the expenses of his preliminary visit and removal to New York. Had he given his undivided attention to San Francisco just then, it is, in fact, almost certain that he would have added largely to his millions. Good shipping wheat, which sold in 1876-77 at an average of \$1.50 from July to September, advanced to \$1.75 in October and November, and to \$2.10 from December to March, till finally from April to June the average market value was \$2.45 per cental. Keene, when subsequently viewing the situation, could not help seeing that he had two narrow escapes on the eve of his departure from San Francisco—one from losing a fortune in freights and one from making an additional fortune

in wheat—and this experience was no doubt largely instrumental in suggesting and influencing his wheat operations in New York and Chicago, where he usually planted himself squarely on the side of the farmer.

Keene, in casting his eye over the San Francisco trade, before and after his departure, could see with a glance what caused the ruin of so many California operators, and that, besides having more chances in his favor, there is much wider room for speculation on the side of the farmer than against him. But it is one thing to control the Pacific coast surplus as against the English and American ship-owners, and another thing to control the Eastern surplus as against the European consumer. Keene's Eastern operations were, however, on so large a scale and so well planned that they would doubtless have succeeded under any ordinary circumstances. Only for entirely unexpected contingencies he would have achieved a gigantic success, but it is the unexpected that always happens in the wheat market. The rocks on which Mr. Keene's vessel split were first the Australian and again the Indian supplies, which, under the stimulus of his bull movements, first demonstrated their importance in the world's wheat market. Before that time the large supplies from India and Australia, which have since become established facts, were considered out of the question. Still, in altogether giving up wheat, after dropping a few millions, Keene only hastened his downfall. A corner in dear wheat was bad enough, but not quite so hazardous as indiscriminate put and call options in Eastern railroad securities.

AVERAGE PRICES OF CORN.

Cincinnati Price Current's monthly and yearly average prices of corn in Cincinnati for 36 years:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	Sept. m'b'r	October.	Nov. m'b'r	December.	Yearly average.
1848.....	32	27	25	28	27	26	30	31	32	28	27	28	30
1849.....	27	25	25	26	27	31	33	36	38	34	31	30	30
1850.....	31	32	36	38	46	50	48	50	49	41	33	37	41
1851.....	40	36	37	37	37	37	37	37	34	34	32	29	36
1852.....	28	28	28	27	28	30	32	39	43	41	40	37	33
1853.....	42	43	40	41	40	43	48	55	55	55	41	41	45
1854.....	40	46	45	49	53	52	46	50	68	65	57	58	52
1855.....	60	64	66	75	78	75	71	70	55	59	58	61	64
1856.....	40	39	39	34	34	36	40	48	54	55	52	50	46
1857.....	52	53	56	57	71	70	67	55	43	37	39	56	53
1858.....	31	39	35	36	40	51	54	56	56	50	55	60	47
1859.....	75	79	79	80	85	81	82	78	73	61	45	49	72
1860.....	54	49	49	45	48	47	45	41	48	41	25	32	45
1861.....	35	34	33	33	34	28	29	28	27	30	29	28	31
1862.....	28	30	34	33	36	32	33	35	11	40	47	45	36
1863.....	50	66	66	62	57	55	57	60	73	88	98	95	69
1864.....	110	102	95	105	117	114	116	123	124	114	122	118	114
1865.....	110	130	91	71	73	65	68	68	65	55	52	50	72
1866.....	54	51	48	52	58	62	63	58	68	82	89	79	64
1867.....	61	62	67	89	91	78	75	88	105	104	98	87	82
1868.....	90	84	86	89	96	93	88	93	99	100	74	68	88
1869.....	67	64	65	65	66	65	79	95	96	87	94	83	77
1870.....	77	72	74	87	98	95	92	83	72	62	52	51	76
1871.....	52	55	57	57	55	56	58	51	52	54	49	47	53
1872.....	48	47	45	49	52	50	49	45	45	41	33	41	46
1873.....	41	40	39	41	48	43	46	46	53	49	50	57	46
1874.....	60	59	63	66	70	66	66	66	81	78	72	69	68
1875.....	67	67	68	73	76	70	72	75	68	60	61	60	68
1876.....	41	42	47	50	48	43	46	44	47	48	47	44	46
1877.....	44	41	41	45	50	48	48	47	48	45	41	39	45
1878.....	39	39	41	43	42	41	43	42	42	39	34	32	40
1879.....	32	35	36	38	39	39	40	38	39	46	44	44	39
1880.....	44	40	41	41	41	39	40	41	44	42	48	44	42
1881.....	42	43	45	48	48	47	51	63	69	70	66	66	55
1882.....	67	63	67	78	78	76	81	78	68	71	71	50	71
1883.....	55	58	55	55	55	53	52	52	52	51	51	50	53

THE WHEAT ISSUE.

So much has been said during the last month or two regarding the Indian wheat supply and the probability of America being superseded in the markets of the world by cheaper supplies from other sources that we think the following figures, compiled from the official reports published by the British Board of Trade, will be of interest. The imports into the United Kingdom during the month of March for the years named were (in hundred weights) as follows:

	1884.	1883.	1882.
Russia.....	210,100	365,410	598,918
India.....	354,518	445,411	1,212,737
United States.....	1,979,950	2,277,258	2,350,221
Other sources.....	456,936	1,020,686	703,592
Total.....	3,001,513	4,108,768	4,874,488

For three months ending March 31 of each year the imports were as follows:

	1884.	1883.	1882.
Russia.....	680,889	974,253	2,081,490
India.....	1,894,695	1,421,709	3,533,425
United States.....	6,057,626	7,893,757	6,654,132
Other sources.....	1,348,394	2,528,761	1,822,834
Total.....	10,181,104	12,758,480	14,111,890

These tables show that the imports from all sources have decreased largely except from the United States, from whence the imports in March were about 10 per cent. less than two years ago; and it should be borne in mind that imports into the United Kingdom in March represent sales made at the high prices prevalent in January and February. But the most significant item, and the one of greatest importance to American farmers, is, that the imports from India and Russia (our principal competitors) are only about a third as much for March as for the same month two years ago, and for the three months of the current year they are less than half the same period in 1882. It certainly doesn't look as if there was good cause for panic among American wheat-growers just yet.—*Tribune*.

THE AMERICAN ELEVATOR AND GRAIN TRADE.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

THE OFFICIAL CROP REPORT.

The returns of the U. S. Agricultural Department of May 10 make the prospect of the cereal crops within 5 per cent. of the standard of full condition; the May average is 94 against 83½ in 1883. Not estimating exceptional dangers, a production of 350,000,000 bushels of winter wheat is indicated. The aggregate insect ravages are trivial, a few are returned from the fly. The winter wheat crop of New England, though scarcely appreciable in quantity, is high in condition. The Middle states have an average of 90 to 100; the Ohio Basin makes a less favorable showing with slight difference north or south of the river. The large wheat-producing states, 100 representing a full stand, healthy plants and medium growth, are rated as follows: New York, 97; Pennsylvania, 98; Kentucky, 99; Ohio, Michigan and Indiana, 85; Illinois, 87; Missouri, 94; Kansas, 103; and California, 95. Seeding of spring wheat was about finished in Minnesota, but delayed by heavy rains, and low temperature in Dakota, and not completed.

Rye promised as well as wheat, the general average being 96, while it was several points higher than wheat in the principal states of the West. Barley gave a general average of 101; in New York, 100; in Pennsylvania, 100; in Michigan, 98; and 103 in California.

"THE FUTURE OF WHEAT."

A recent article in the New York *Sun*, which has attracted considerable general attention, as to the future of wheat, in view of the competition of India and Australia, is reviewed with some contempt by "A Wheat Man," in the Chicago *Inter-Ocean*. The statements, also, of many of the reviewers are denied, and their reasoning pronounced to be the "absurdities" of mere "option" dealers, who never handled wheat and could not judge of its qualities or tell it from barley, even if in their hands. Australian wheat, says the writer, in reply to the latter, is not inferior grain, but always brings \$1.50 per quarter more in the English markets than our No. 2 spring, while the best grades of India wheat are also dangerous competitors, and the inferior grades compare favorably with our No. 3. The article alluded to was directed mainly against Chicago speculators. It portrays with exaggerated statements the dangers of this competition, and while admitting that the highest American grades are superior to these Eastern products, claims that the average yield of the latter is more than double that of ours. "The advantages of these countries," says the *Sun*, "are incontestable, and it is only sheer pig headedness that makes people think that wheat is still cheap at one dollar, and that Europe cannot do without our surplus." The article also repeats the

old statement that the people of India live on millet, etc., only, and are not wheat consumers. The cost of raising wheat there is also put at only thirty-six cents per bushel, against sixty to ninety cents in America, and the idea is scouted that we have not wheat enough for home consumption. It is also stated that people generally do not buy wheat, and that "there is more flour in the market than millers know what to do with."

"Wheat Man," in reply, quotes the official reports as to Australia, where fabulous wheat yields have been reported. In the entire Australian provinces the September report of 1883 gave a wheat area of 3,392,181 acres, producing a crop of 29,675,899 bushels, or an average yield of only 8.84 per acre; the lowest yield was 4.57, in South Australia; the two highest, respectively, were 18.88 and 22.69 bushels in Tasmania and New Zealand. This year's yield is reported not to exceed 10 bushels per acre. As to the cost of production, Ellis Bros., the Dalrymples of Southland, place the average cost in 1880 at 92 cents per bushel, and last year, with McCormick reapers and the phenomenal yield of 22.5 bushels, the cost was 64 cents per bushel. At the general average yield, as above, it would have cost over \$1 per bushel. As to India and her "no wheat consumption": Her last year's wheat crop was somewhat over 300,000,000 bushels, of which only 60,000,000 were exported, leaving 240,000,000 bushels actually used at home. Sir James Caird, an eminent British authority, says that his belief is that, with the rapid increase of her population and consumption, India will eventually require her whole wheat crop for home use. Such are some of the factors in this equation of American wheat supply and foreign demand. In the face of the present immense over-supply, as claimed, during a period of six weeks recently we exported over 7,500,000 bushels of wheat, and flour so estimated. Says the writer: "Wheat is cheap, yes, far too cheap; but England, Australia and India feel the injury equally with us, and with them we may yet look hopefully for an era of better prices."

WHEN THE TITLE PASSES IN SALE OF GRAIN.

Among the many questions that give rise to litigation and dispute in business transactions, none has caused more than the apparently simple one whether a certain transaction is a sale or merely a contract to sell, viz: Whether the property bargained for has become the property of the buyer, or the title still remains in the seller. That the determination of this question is often of the greatest importance is easily seen, as, for example, where property is insured as the property of the seller, and it turns out that the title has passed to the buyer, the insurance in favor of the seller would be uncollectable because he would have no insurable interest; or where the purchaser becomes insolvent, the question may arise as to whether the title has passed so as to entitle the assignee or the judgment creditors of the buyer to take possession of it, and innumerable other instances. As this question often arises in connection with the sale of grain and other articles in bulk, we have thought it might be of interest to our readers to have explained a few of the leading rules of law by which this question is determined by the courts.

In the first place, it can be fully determined between the seller and buyer by express provision whether the contract is verbal or written, by a stipulation that the title shall remain in the seller until actual delivery has taken place, or until any other specific act is done, or shall pass to the buyer only upon the doing by him of certain specified acts. It is only where the parties to the trade themselves have made no provision for the settlement of this question that the law has to decide it for them, upon certain general rules.

In the absence of any specific agreement of the parties to the trade as to when the title shall pass from seller to buyer, the rule adopted by the law is that where a certain specified lot of property is the subject of the trade, as for example, all the wheat in a certain bin, the hay in a specific stack, or any other specified lot or quantity, and the price

is agreed upon, then the title passes to the buyer at once, and he can take the property away, and if it burns or is otherwise destroyed, the loss is his, and the seller will have an action for the price. If, on the contrary, the sale is of a certain number of bushels generally, or but of a particular lot, yet to be measured, then the rule is the opposite, and the title remains in the seller until the grain is measured and set apart to the buyer and he notified of such setting apart for him.

Again, if the seller is to do any act before the sale can be completed, as for example shelling the corn, sacking the wheat or flour, or any other act before delivery, the title does not pass before such act is done. The same is the rule if anything is to be done by the buyer before he can demand possession, as for example, if the sale is conditional that he shall pay for it before delivery, or secure his paper or any other act required of him. Under these circumstances, even if he has actually got possession of the property, and fails or refuses to pay or give security, the title to the property remains in the seller, and he can replevy it from the buyer, or from his assignee in bankruptcy, or an execution creditor of the buyer.

So, in every instance where there is any condition to the sale, as for example, if the contract is that A will buy all the wheat in a particular warehouse or bin, and pay a specified price per bushel, provided the wheat shall be inspected and prove to inspect up to a certain grade, in such case the title does not pass to the buyer until the grain is inspected, because prior to inspection there was no way of determining whether the contract would be fulfilled, as the wheat might inspect a lower grade, and then the buyer would not be bound to take it. It is frequently supposed that possession of the property absolutely determines this question, but this is erroneous. Even though the buyer may have the property in his possession, if any condition of the sale remains unfulfilled the sale is not complete, and the title remains in the vendor, and he can take his property back again. This question is a very extensive one, and whole treatises have been written upon it, and the law books are full of cases upon it, and we can not pretend to give any extensive explanation, but we simply desire to call our readers' attention to a subject which is of the utmost importance, and point out a way whereby they can avoid much needless litigation and loss, by providing against the question arising, by specific contract and we merely suggest a few general rules adopted by the courts in the absence of a specific provision by the contracting parties.

MR. JAY GOULD is reported to have said recently in reference to the future of American wheat production, that we were approaching a time when we would require all of our crop of this cereal for home consumption, and have none to export. There are apparent good reasons for this view in the past history of this crop. As a general rule, the center of its largest production has moved steadily westward, the exhaustion of the soil causing a diminution of yield and a comparative increase of expense, having made other products more lucrative. While vast new fields of peculiar value for the growth of wheat are still being opened in the Northwest, these virgin soils are also being skimmed of the cream of their productive energy; the richness of these alluvial deposits is being exhausted, and they will doubtless follow in the wake of the Eastern wheat fields. The yield of the great center hitherto of the hard wheat and fine flour, Minnesota, has already greatly declined in average yield. The increased expense of fertilizing the grain fields, of a more careful selection of seed and higher agriculture, can only be induced by prices that will render it remunerative. The conditions, also, of the highest development of national wealth and prosperity, are based on diversified agriculture and the increased creation of manufactured products for exportation, in place of the raw material. American mechanical skill and unlimited resources in almost every field of manufacture, as well as agriculture, point to a steady pressing forward in this direction, to the advantage of the entire nation, as well as those who continue to raise the cereals.

Editorial Mention.

NO NEW developments in the grain dump litigation this month.

ELEVATOR building will be active in the Northwest and West this season.

IT is a good time to sheathe your elevator in metal if there are outside fire risks.

THIS is the most convenient season to make any contemplated improvements in elevators.

WE welcome back to our pages this month the Union Iron Works of Decatur, Ill., and the Caldwell Conveyor.

IF you have an elevator to sell or rent, or want a partner, or are looking for a location, advertise in our columns.

F. A. WINCHELL, of Kingsley, Iowa, sends us three subscriptions for as many different houses in which he is interested.

THE GREAT WESTERN MFG. Co., of Leavenworth, Kan., report a very good trade in elevator building and elevator supplies.

THE *New York Produce Exchange Reporter* of May 3 contained a complete history of the New York Produce Exchange, which is full of interest.

MESSRS. ALLEN DEMP & Co., of Paris, Ill., in subscribing, say: "We find the AMERICAN ELEVATOR AND GRAIN TRADE a valuable paper, with lots of information."

THE BARNARD & LEAS MFG. Co., of Moline, Ill., report that they are getting a large trade from new elevators as well as from old houses that are making renewals, additions, or improvements.

WITH its next issue this paper will be two years old, and now is a good time to send birthday presents in the shape of dollar bills for subscriptions, for which twelve monthly banquets will be given.

MR. CHAS. R. VINCENT, representing Messrs. Skinner & Wood, of Erie, Pa., paid us a pleasant visit while in Chicago, on his way to the Northwest to look after the extensive trade of the firm in that part of the country.

EVIDENTLY the railroad question will not down. Never has there been such persistent discussion of the question in all its phases, and never have the railroad men themselves been so disposed to discuss the subject in a fair and impartial manner.

THE Grand Trunk Line contracted on May 10 for 75,000 bushels of wheat for Liverpool, from Chicago, at a through rate of fifteen cents per hundred. It goes all rail to Montreal, and is said to be the lowest rate ever given from this point.

IF you need anything for your elevator from an elevator cup to a steam engine, look over our columns, and we will warrant that you will find what you want. About everything that a grain man ever needs is advertised in our columns by reliable firms.

WILD WEDNESDAY of this week did not affect corn and wheat to the extent that would have been supposed. As it was Wall street, and Wall street alone that caused the flurry, it is to be hoped that the results will not extend beyond the precincts of that stock-gambling locality.

WE acknowledge the receipt of a handsomely engraved invitation to attend the opening exercises of the New York Produce Exchange on May 6. An illustration and description of the magnificent new structure of the Exchange is given in another part of this paper.

MESSRS. SKINNER & WOOD, of Erie, Pa., have a very unique advertisement in this issue, occupying an entire page, consisting of *fac simile* letters from customers, all speaking in high terms of their engine. A showing of this kind can hardly fail to attract the attention of elevator owners to the merits of the engine.

THE River and Harbor Appropriation Bill reported to the House by the proper committee proposes to appropriate \$2,500,000 for the improvement of the Mississippi below Cairo; \$500,000 above the latter point to the Illinois River; \$500,000 from that point to the Des Moines; from the latter point to St. Paul, \$300,000; for Calumet Harbor, \$20,000; for Calumet River, \$50,000; and \$100,000 for the Chicago harbor.

A CORRESPONDENT of an English journal, writing from India, states that the wheat growers there are mostly small cultivators, and given to cheating, selling as much dirt with their grain as possible. This wheat in England has to pass through a dirt separator, without which treatment it is unfit for use. The exposures made are hardly sufficient in their influence to prevent the natives from adding dirt to their wheat, already too dirty for European use.

ON the New York Produce Exchange on May 14, when the Wall street failures were reported, great excitement prevailed, with much loud roaring of the "bears." Three groups of speculators collected—one around the pit, and one each at the news and the stock tickers. As a failure was announced, or a drop in a stock, the "bears" made a rush to the pit and "jumped on it." Wheat in the skirmish fell from $2\frac{1}{4}$ to $\frac{3}{4}$ cents; corn, $\frac{1}{4}$ to $\frac{1}{8}$, and oats $\frac{1}{4}$ to $\frac{1}{8}$ of a cent; but at the close the market had rallied, and closed fairly strong.

MR. J. H. MILNE, chairman of the committee of the Chicago Board of Trade in charge of the market reports, said recently, in relation to the "bucket-shops," that the trouble had been less than was expected, and everything was progressing satisfactorily. In one day they had cut off fully 100 places where they had reason to believe their reports were being obtained for illegitimate use. Others who had been cut off, on investigation, being found to have used the reports legitimately, have been reinstated. Eventually perfect success is anticipated by the committee.

IN the U. S. Circuit Court, on May 13, Chas. Kaestner, of this city, asked for an injunction restraining the Bemis & McAvoy Brewing Co. from infringing upon his patent for an improvement in "mash rakes," of which the petitioner claims to be the original inventor, obtaining a patent on Aug. 20, 1878. Since the granting of this patent, it is charged that the above named company, without license from the patentee, commenced the use of a machine involving these improvements, and persists in so doing, thereby infringing the petitioner's patent rights. Restraint was requested.

THE eighteenth and final meeting of the Toronto Corn Exchange Association was held on May 13, the organization being about to unite with the Board of Trade. The report of the Committee of Management regretted the somewhat gloomy history of the past year. On account of the short crop and poor quality of the wheat the export traffic has been nearly at zero, the millers mainly being the buyers, few of whom have realized any profits. The low prices of wheat in Chicago, and low freight rates, had given the advantage to the states in this competition, enabling American millers to ship large quantities of flour into Canada, deeply injuring the milling industry of the latter. A comparison of prices, says the report, shows that purchasers get no advantage by "dealing through travelers." While this matter has been freely discussed in mercantile circles, where there is a strong opposition to sending out "drummers," there has been no harmony of action, and the evil has continued to extend. It should be considered, say the committee, whether steps to-

ward entirely discontinuing or regulating this practice ought not to be at once taken.

A THIRTY-YEARS' resident farmer of Adelaide, Australia, on a recent visit to Chicago, stated the following interesting facts as to the wheat growth of that country: The average weight of ordinary commercial wheat there is over sixty-five pounds to the bushel, and he saw at an agricultural exhibition a 100-bushel lot that averaged sixty-seven pounds. The average of British winter wheat is sixty-two pounds, while Chicago spring wheat averages only about fifty-nine pounds, although sixty pounds are sold for a bushel. The Australian drawback is the small rainfall, averaging, near Adelaide, only about eight inches. The people, however, are planting trees largely, especially the eucalyptus, which, it is expected, will cause a great increase of rainfall. If this prove true, wheat production in Australia will be greatly increased, while the practical ownership of the railroads by an economical government insures cheap transportation.

A CORRESPONDENT of the Minneapolis *Tribune*, writing from La Moure, Dak., on April 29, gives a glowing and somewhat extravagant estimate of the growing wheat crop of Dakota. That county, he says, has planted 40,000 acres of No. 1 hard wheat, while from reports received from Red River Valley and central sections indicate a total yield of 35,000,000 or even 40,000,000 against about 17,000,000 bushels last year. The production of La Moure county last year was not over 300,000 bushels, but will probably, with fair success, reach 2,000,000 this season. There has been an increased acreage at all points on the U. P. Railroad's main line west of Fargo, as well as on its branches to Fergus Falls and the Black Hills, of 100 per cent. Farmers are fearing that this promised increase foreshadows a depressed market, but the writer says that there is no likelihood of the winter's price falling below 75 cents for No. 1 hard, at which price its cultivation there is profitable. The steady demand of the Minneapolis mills for that wheat will probably hold the prices.

MR. J. W. BEACH, of Chicago, Ill., has obtained from the Canal Commissioners the privilege of laying a pneumatic tube along the line of the Illinois and Michigan Canal from this city to La Salle. Mr. Beach obtained his patent in November, 1882. He proposes to incorporate a Pneumatic Transportation Company, to be composed of well-known capitalists, for the purpose of transporting grain as well as packages. The motor power will be compressed air, and the inventor claims to be able to attain a speed of ten miles per minute. The tube projected is to be 99 miles long, and 17 inches in diameter. At both points from which material is sent, air is to be forced into the tube at 100 pounds or more pressure per square inch; and receivers are to be attached at each end, and a brake so arranged in the pipe as to check the force of the movement. Arrangements will also be made to detach the tube at intermediate points for receiving or sending material. Regular time tables will be supplied. Mr. Beach anticipates eventually extending the line to St. Louis, and after a trial of one, to increase the number of tubes. Operations are to be commenced as soon as practicable. Mr. Beach has received a letter from Westminster, Eng., stating that a similar tube, extending from the House of Commons to the Central Telegraph Office, a distance of two miles, has been in successful operation for some time.

WHILE the season of navigation is now well open, Montreal obtains no through transportation grain. There are, it is said, some sixteen large steamers and one sail vessel in that port, but no grain freight offering. The whole inland Canadian grain trade is stagnant, and all interested parties are urging methods for relief of the evil, especially the freeing the St. Lawrence route from tolls, and lessening other expenses. The action of New York, as to the Erie Canal, has stimulated greatly this effort, by intensifying the

competition of that route. The freight rates on grain from Chicago to New York are lower than to Montreal from that point by $1\frac{3}{4}$ cents per bushel on wheat, and $1\frac{1}{2}$ cents per bushel on corn. The alarm and excitement are great and general, and the Dominion Government will be urged on all sides to take immediate action. These canal tolls add about $\frac{2}{3}$ of a cent to the freight charges from Chicago to Kingston; this reduction, it is thought, would bring the rate to a par with that from Buffalo to New York. If the government acquiesce, forwarders intend reducing rates $\frac{1}{2}$ of a cent per bushel between Kingston and Montreal, where the proportionate rates are now much higher than between the cities above named. A reduction of the same amount is expected on wharfage charges, and on those of the elevators to the level of last year. These reductions will aggregate a total of $1\frac{1}{2}$ cents per bushel on the entire route, and, it is believed, will relieve the grain traffic of Canada of its present disadvantages.

GOVERNMENT CONTROL OF TRADE AND INTER-STATE COMMERCE.

The grain trade has a deep interest in a class of legislation now being strongly urged upon Congress, represented by the purchase and nationalizing of certain canals and a system of waterways for the transportation of products from the Mississippi River to the great Lakes; to do the same in behalf of a telegraph system, to be placed under the Postoffice Department; and to inaugurate a bureau for regulating inter-state commerce. The American tradition, tersely expressed by the old-school democratic legend—That is the best government which governs least—restricts the legitimate sphere of this way to the protection of public and private rights, with the largest latitude possible to individual enterprise and activity. Reviewing our own national history, no one can doubt that this was a wise and beneficent conservatism in its formative period, giving free scope to all the multitudinous and often conflicting elements of self-government at a time when we were deficient in the practical wisdom necessary for judicious selection and action—that of experience. Chaotic as seemed the movements, and as slender as the ropes of sand as were then the confederations of our communities, the principles by which a real strong union could be based developed themselves, while the most profitable directions for industry and trade to pursue became clearly defined, unhampered by the meddlesome and premature control of government.

The period of consolidation, when both by external conflict and, as in our late civil war, through the sequence of ordeals, the nation's right and power to exist was tested by a combat between free citizens and kindred from common loyalties, is one that demands of government, in order to secure success, a concentration and extension of its powers, such as martial law presents, pregnant with rules and acts that violate all our ordinary civil and personal rights. The intense Anglo-Saxon antagonism to military rule and standing armies, ingrained in the hearts of our people, made all forecasts of danger as to their continuance merely imaginary, and the fierce soldiers and generals of yesterday have become the quiet farmers, artisans and citizens of to-day, with nothing left to tell of those vast armaments and emergency of war but the results—a nation self-assured with a world-wide recognition of its power and permanency among the governments of the globe.

But in our present period of developed maturity, after such experiences, the old, traditional, conservative limits to governmental control and activity may, perhaps wisely and to the advantage of the nation, be largely extended. With the statesmanship of our day, standing in the blaze of public scrutiny and that of the press, from which no scheme, however secretly arranged and executed, can escape, with the lessons of experience taught by our civil service daily acquiring a stronger control over public work and officials, the old tradition that the poorest and dearest work executed was always done by government employees, that rings and jobs are the rule, econ-

omy and efficiency the exception, it may be fairly claimed is no longer true. The bare suspicion of "Credit Mobilier" manipulations has been said to have destroyed even some honest statesmen, who were simply deceived; while among illustrations from a more limited field but equally germane, we may refer to the grain inspection of Illinois which, some dozen years since, was placed under state control, with the hue and cry opposing that it would become a mere "political" wheel in our partisan machinery, but which is now, in our home and in foreign markets, recognized as perhaps the best and freest from causes of complaint—none of which have ever been of corruption or moral obliquity—of any in the world of traffic. Even the late attempt of Gov. Hamilton to make political capital out of the Chicago inspectorship, so far as it had any influence, recoiled on his own head, and gave no aid to his official boom. Some while since, Washington City was taken out from municipal control, and is now operated under the general government, with the result, as is asserted, amidst the almost universal mal-administration of our municipalities throughout the country, of presenting the wisest, most economical and purest city administration in the United States.

Since the period of our national youth, the relations of concentrated capital controlled by a few holders, with great public franchises in their hands, and using its vast power for greed and selfish ends in the management of all the vital factors of our commerce and trade, as related to public and individual interests, have greatly changed. Here are now the centers of jobbery and huge rings, capable of buying up legislatures and municipalities, and to compel action in accord with their designs, regardless of public justice or the rights of producers and dealers. This name alone "The Standard Oil Company," is only a synonym for a history of dark and mysterious schemes and manipulation, and simply an illustration, brilliantly illuminated with the Napoleonic largeness of its field of work, and the Borgias-like monstrosity of its nefarious success, of many other huge corporations whose ends are equally ignoble and injurious.

AMERICAN AGRICULTURE NOT THREATENED.

A recent report of the English commission on American agriculture presents some interesting views, from the British standpoint, as to the future of American competition in supplying her deficiencies in breadstuffs. The well-known fact is repeated that for ten years past European production has met with unfavorable seasons, and become greatly diminished, while exceptional opposite conditions of agriculture have existed in America with the increase of facilities and cheapening of transportation. America has thus been able to supply the requirements of Europe both in breadstuffs and meat, at prices unprofitable to European producers. Many remedies have been proposed in the way of government protection, and aid, etc., but have been slow in coming, and the question is eagerly asked by the European farmers as to whether America can continue to furnish this large cheap food supply and meet the requirements of her own rapidly increasing population. Statistics, says the report, show a gradual decrease in the relative percentage of farming in America during the ten years ended with 1880 from 47.35 to 44.10 per cent.; but the annual income of production is highest in those states where this percentage is least. The extension of the wheat fields West will enable American producers for a long time to come to export cereals; while meats and more concentrated products will take their place when they become unprofitable.

The report says: "It is a mistake to suppose that the larger part of American wheat is grown west of the Mississippi; or that the heaviest yields are on new lands; or that spring wheat will ever exceed in quantity the winter wheat." Spring wheat takes the lead in pioneer farming, and declines inevitably as systematic farming comes in. The United Kingdom during the past ten years has bought annually of the United States prod-

ucts to the value of over \$374,000,000, and has returned goods worth a little less than \$161,000,000.

The *London Times*, referring to this report, says that the United States are feeding more than half the British nation with the "staff of life," while their surplus of wheat and flour is increasing, and is likely to do so indefinitely. Their increase of population is enormous, "but corn beats it;" the present wheat aggregate is more than four times that of 1849. This increase is steady and not dependent on the opening of Western virgin soil, for it is greatest in the Eastern states. This increase in grain is also equaled by the condensed forms of animal food. "What, then," asks the *Thunderer*, "is there to prevent the United States from sending us forty years hence \$750,000,000 of food—that is, enough to supply the whole population of these isles?"

The failure of M. Fraley, of Fraley, Carter & Co., commission dealers of St. Louis, Mo., announced on April 25, created great excitement in Board of Trade circles. The dealings which brought about the result were on the Chicago market, and the firms of this city known to be involved are Jackson Bros. & Co., Irwin, Orr & Co., mainly, and also Kent & Co., to some extent. It is stated that in the April break in wheat, which declined in Chicago to 80 cents, and in St. Louis to under 99 cents, the latter merchants were "bearing" the market, Moses Fraley being the principal seller, dealing mainly in Chicago, making, as is said, about \$400,000. But he did not stop here, and when the advance came he had sold a great deal, and was heavily short, but anticipating a decline he continued selling until he had 7,000,000 bushels out, but the market advanced, until on April 28 it was 15 cents above the lowest point. Mr. Fraley commenced to cover his sales some days before, and had bought the full amount as above, but the margins became so heavy that he concluded to suspend. The losses, mostly in Chicago, were variously estimated at from \$600,000 to \$700,000 on wheat, and about \$200,000 on stocks, etc. But various firms thought that the losses would not exceed from \$20,000 to \$50,000. On May 5 the Chicago creditors were notified that Mr. Fraley was ready to settle all his accounts at par, and asked for their statements. Mr. Fraley stated that he was ready to pay out \$330,000 on receipt of statements; in New York alone he would pay \$180,000, and that this was all that was due outside of margins put up. Lawyers told him that he could settle at twenty-five cents on the dollar, but he refused to do it. In the interval considerable gossip took place, some quite severe and unfavorable, but in the main attributing honest motives to Mr. Fraley. The wires were busy after the announcement, with congratulatory notices and commendations.

The corporation counsel of this city, in reply to a letter of inquiry from Assessor Ryan as to the assessment of grain, replies as follows:

"The grain elevators about which you inquire are known as warehouses of Class A. The owners of the same are required by statute to furnish daily to the 'Warehouse Registrar' a statement of the grain held by them, and of the warehouse-receipts issued and canceled. I therefore wrote to that official as to the method of ascertaining the ownership of grain at a given date, and inclose his reply. You will see that his books, which are official records, show just what is shown by the books of the elevator men themselves. You may experience some difficulty from the fact that the receipts are transferable, and, by indorsement, pass the property in the grain. But, having the names of the parties to whom the receipts were issued, you can trace the ownership upon the 1st of May. As to your second question, it is only necessary to say that the statute requires you to assess all personal property 'including all grain on hand on the first day of May.' And by Chapter 114 of the Revised Statutes, the grain is represented by the warehouse receipts issued for it. In case any person believed by you to have been the owner of grain May 1 does not schedule the same, you have ample power under Sections 26 and 80 of the Revenue act to verify your belief. Of course you will understand that warehouse receipts, being of a quasi negotiable character, may be held merely as security for a loan, or may be held by a commission merchant for his principal, but, once tracing the receipt to its holder, it should be comparatively easy to assess the grain to the owner of the same."

YEARLY AVERAGE PRICE OF WHEAT IN ENGLISH MARKETS.

The following shows the yearly average price of English wheat in English markets, in quarters, and the equivalent per bushel in American currency:

Quarter.	Bushels	s. d.	dollars	Quarter.	Bushels	s. d.	dollar.
1874.....	55	9	1.69	1879.....	43	10	1.3
1875.....	45	1	1.37	1880.....	44	4	1.3
1876.....	46	2	1.39	1881.....	45	4	1.3
1877.....	56	9	1.71	1882.....	45	1	1.3
1878.....	46	5	1.40	1883.....	41	7	1.2

The average for the ten years is 47s per quarter, or \$1.42½ per bushel.

For the preceding period of ten years the average price was 52s 9d, or \$1.60 per bushel.

This season, for seven months from Sept. 1 to March 31, the average has been 39s 5d per quarter, or \$1.20 per bushel.

Special Notices.

The Chicago Scale Co. sell Scales of all kinds also Portable Forges and Blacksmiths' Tools of all descriptions at about one-half usual prices. Buyers will save money by sending for their Price List.

Elevator Men—Howes & Ewell, of Silver Creek, N. Y., make a full line of wheat cleaning machinery. Read their advertisement on first cover page.

To Whom it May Concern

All persons are advised, before paying money to James M. Harper, or anybody else, for alleged infringements on PATENT GRAIN DUMPS, to

WRITE TO—

R. M. McGRATH, ESQ., —OR— HON. A. J. BELL,
Lafayette, IND., Attorney at Law,
Peoria, Ill.

R. JAS. ABERNATHEY,

General Agent for the Barnard & Leas Mfg. Co for Kansas, Western Missouri and Southern Nebraska. Address,

Box 880, KANSAS CITY, MO.

UNSOLICITED AND POINTED.

GLASCO, KANSAS, January 4, 1884.

Barnard & Leas Mfg. Co., Moline, Ill.

GENTLEMEN—After having used your Victor Corn Shelter and No. 1 Improved Corn Cleaner in our elevator for some six months, we wish to congratulate you upon furnishing the *ne plus ultra* of Corn Shelters and Cleaners.

We have never used the equal of the machines you furnished us. They do their work to our entire satisfaction. Very respectfully yours,

W. R. WEST & CO.

BALTIMORE, MD., January 29, 1884.

Barnard & Leas Mfg. Co., Moline, Ill.

GENTLEMEN—Your draft in payment of No. 3 Warehouse Separator and Grader purchased of you, was presented several days ago, and paid. The machine gives us great satisfaction, and we unhesitatingly say that we believe it to be the *best* one in the market for cleaning and grading *all kinds* of grain. We shall take pleasure in recommending it to any one wanting such a machine. Our only regret is that we did not get one of double the capacity. Very respectfully,

SWIFT & LUCY.

SITUATION WANTED.

As buyer for a grain dealer, by a young man thoroughly acquainted with the business, and fully competent to run an elevator. Can furnish \$500 to put into the business if wanted. Address

S. C., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

SITUATION WANTED.

By a man who has had ten years' experience in handling grain, a situation as buyer for a grain dealer. Can speak German and English. Am thoroughly acquainted with the business, and fully competent to run an elevator and engine. Can furnish the best of references. Address

Box 105, Marion, Ohio.

WANTED.

A man of energy, steady habits and good address to purchase one-half interest in our paint and cement for the State of Illinois. For particulars apply at the OFFICE AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill., or to N. T. PATE & Co., MANUFACTURERS OF RICHMOND IRON PAINT, No. 1208 E. Cary Street, Richmond, Va.

BUSINESS WANTED.

An active young business man, member of the Baltimore Corn and Flour Exchange and having a thorough knowledge of the grain and mill feed business, would like to represent some responsible Western house in Baltimore, either in the above business, or one in connection therewith. Best of references as to capacity, character, etc. Address

J. G., of Baltimore, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

For Sale.

FOR SALE CHEAP.

A new Seeley Elevator complete, in Western Iowa, in a splendid grain country. Capacity of Elevator, 20,000 bushels. Best reasons for selling. Address

SEELEY, SON & Co., Fremont, Neb.

ELEVATOR FOR SALE.

Of 15,000 bushels' capacity, on the Illinois Central R. R., in Storm Lake, Iowa. Good grain and stock business. Best reasons for selling. Address

J. W. PLANALP, Storm Lake, Iowa.

ELEVATOR FOR SALE.

Of 10,000 bushel capacity. On the Lake City Branch of the Chicago & Northwestern Railroad. Good grain, coal, and stock business. Horse-power. Price, \$1,200. Address

A. GRANT, Lake City, Iowa.

FOR SALE.

I offer my warehouse, office, scales, and coal bins for sale. Situated in a grain country. Warehouse has a capacity of 5,000 bushels. Have a fair trade in coal. Good reasons for selling; made known on application. For prices, etc., address

CHAS. L. FLINT, Havelock, Pocahontas Co., Iowa.

ELEVATOR FOR SALE.

An elevator and warehouse, with burrs for corn meal, office and scales, coal sheds, etc. Also a general store with post-office and railroad office. No competition, and a good opening for the right kind of a man. Located in the center of Illinois. Call on or address

A. SNYDER & Co., Radford, Christian Co., Ill.

PARTNER WANTED.

In a mill and elevator business in Kansas. Both mill and elevator are nearly new and thoroughly equipped. Splendid grain country. Have too much to attend to, and want a partner. No better chance anywhere offered, to the right kind of a man. Address

M. J., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

FOR SALE VERY CHEAP.

An 18,000 bushel steam elevator, built in 1882. Located in the village of Pelican Rapids, Minn., containing 800 inhabitants, on the St. P., M. & M. Railroad. Has a new Racine Separator, and is otherwise fully equipped. Has good patronage, and a good flour and feed trade. This is the best hard milling wheat district in the Northwest. Will sell at a sacrifice if sold this spring. Reasons for selling and full particulars given on application. Address

L. W. GRAY, box 167, Pelican Rapids, Minn.

Grain Commission Cards.

G. B. KIRKBRIDE.

M. W. YERXA.

YERXA & KIRKBRIDE, Grain Commission

HARD MILLING WHEAT A SPECIALTY.

Liberal Advances made to Shippers.

MINNEAPOLIS, MINN.

DULUTH, MINN.

Grain Commission Cards.

M. J. FORBES.

GEO. SPENCER

GEO. SPENCER & CO., DULUTH, MINN.

GRAIN ON COMMISSION. DULUTH HARD WHEAT

A Specialty.

ORDERS FOR CARGOES SOLICITED.

A. B. TAYLOR.

D. C. MOAK

A. B. TAYLOR & CO., Commission Merchants Grain, Flour and Millstuffs.

Choice Milling Wheat a Specialty. Careful attention given to consignments and orders for wheat, flour and bran, filled at lowest prices.

MINNEAPOLIS, MINN.

E. B. OWENS & CO., GRAIN AND FLOUR,

153 West Pratt Street,

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GRAIN COMMISSION MERCHANT, 309 Chamber of Commerce, St. Louis.

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I. G. LOMBARD, Esq., President National Bank of America, Chicago.
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C. F. LISTMAN & CO., Commission Merchants and Exporters, 48 Metropolitan Block, Flour and Grain. CHICAGO.

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HAY, CORN, OATS, BRAN, FLOUR,

Meal, Field Seeds, Grain Sacks and Twine.

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Grain Commission Cards.

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For the sale of
BUTTER, CHEESE, EGGS, POULTRY,
Beans, Peas, Maple Sugar, Fancy Creamery Butter, Green and
Dried Fruits, Potatoes, Flour, Grain and Produce generally; Cali-
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We invite Correspondence as to any line of Produce you desire to
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BALED HAY, GRAIN AND FEED.

Seed Corn in Ear or Shelled. Prompt Shipments.

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Special Attention to Shipping Corn to
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Orders for Grain and Mill Stuffs Promptly Filled.

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Extra Facilities for furnishing Coarse Grain in large lots.
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Returns prompt. Correspondence invited. Best market in the
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Buys and Sells Merchandise, Provisions, Grain and Flour and Dairy
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IRON ROOFING AND SIDING

V CRIMPED EDGE IRON ROOFING AND SIDING, Lapped over a V Strip of Wood and Fastened with a Wire Nail.

APPLICABLE TO ALL BUILDINGS.

SCOTT'S STANDARD PATENT IRON ROOFING

IN USE OVER 13 YEARS.

Corrugated Iron Roofing, Siding and Ceiling.

IRON DOORS & SHUTTERS.

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AND PULLMAN CAR WHEEL WORKS,

—Manufacture all Kinds of—

ELEVATOR MACHINERY, STEAM SHOVELS,

Buckets, Building Materials,

And all Iron Work used in Elevators. Dealers in PAPER FRICTION PULLEYS. Correspondence
Solicited and Estimates Furnished.

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BOGARDUS ECCENTRIC MILL

—These Mills are Used for—

Grinding all Kinds of Substances!

And having been used for a number of years, are
well known in the Trade.

Nos. 2 and 5 Mills Grind the Following
Dry Substances:

Raw Bones, Burnt Bones, Pot Shells, Ores, Flint Quartz,
Enamel, Old Crucibles, Charcoal, Plaster, Fire Clay,
Aluminous Clay, Paints, Guano, Feed, Corn, Corn and
Cob, Tobacco, Snuff, Sugar, Starch, Salts, Woods,
Stems, Berries, Seeds, Leaves, Roots, Coffee, Spices,
Mustard, Coconut, Cocoa, Oil Cake, Gums, Tomatoes,
Fish, Leather, India Rubber, Mica, Asbestos, Cork,
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Nos. 3 and 4 for Grinding Wet Substances.

Such as Paints in Water, Oil or Varnish, Printer's Ink,
Paste, Blacking, Starch, and other moist compositions.
Many substances above mentioned

Cannot be Ground by Other Mills,

As the peculiar motion of the plates causes them of
themselves to discharge the ground substances, which
would choke other mills.

The Mills will do a much larger amount of
work than any other Mills in a given time.

For Illustrated Circulars and Descriptive Price List,
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J. S. & G. F. SIMPSON, - - - 26 to 36 Rodney St., Brooklyn, E. D., NEW YORK.

THE "SALEM"

Elevator Bucket.

Shovel Edge, SEAMLESS ROUNDED CORNERS. Curved Heel.

Runs Easy; STRONG AND DURABLE, Empties Clean.

W. J. CLARK & CO., Sole Manufacturers,

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New York Office and Salesroom, No. 9 Cliff St.

WIRE ROPE TRANSMISSIONS!

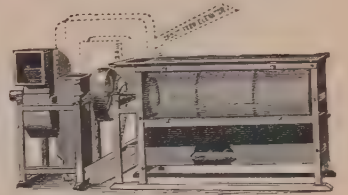
Portable Mills, Pulleys, Shafting, Etc.
Sent for Illustrated Treatise on Wire Rope
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and Pattern List.

WILLIAMS & ORTON MFG. CO., { 403 LOCUST { STERLING, ILL.
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Warehouse Sheller.

“WESTERN” CORN SHELLERS

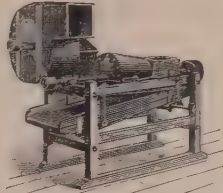


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CLEANERS AND GRAIN GRADERS!

MANUFACTURED

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Warehouse Combined Sheller.

EXCLUSIVELY BY

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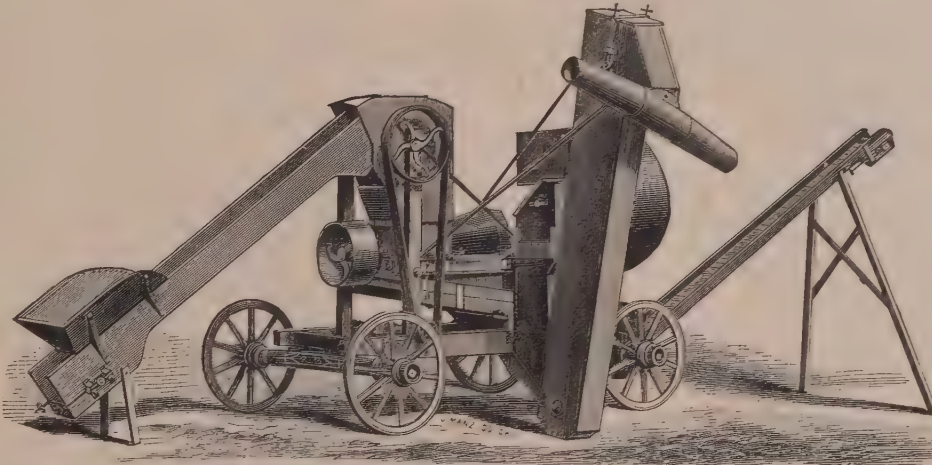
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SIMPLE—STRONG—DURABLE,

Large Capacity,

CLEAN WORK.

Will not CRACK the Corn, and
will Shell Clean in any
Condition.

Field Portable Sheller.

By Every One.

THE BEST

AND ARE PRONOUNCED

Always give Satisfaction.

GREAT WESTERN MFG. CO.,

LEAVENWORTH, KANSAS.

Steam Engines,

PULLEYS,
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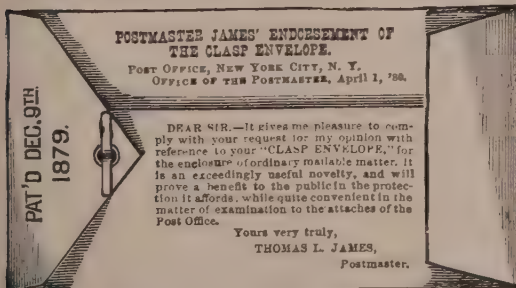
FLOUR MILL

—AND—
ELEVATOR
MACHINERY—OF—
Every Description.

CORN
SHELLERS,
SEPARATORS,
SCALES,
BELTING,
Elevator
Cups,
BOLTING CLOTH,
STEAM PUMPS,
PIPE AND FITTINGS.

We Carry the Largest Stock of Mill and Elevator Supplies to be found West of the Mississippi River.

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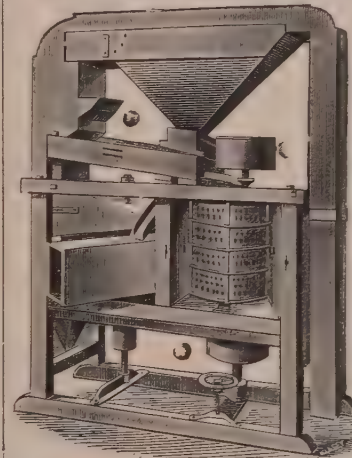


For Mailing Catalogues,
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Samples of Grain, Flour
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And Small Packages of Fourth
Class Matter,
The Clasp Envelope is the
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Samples and Price Lists
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(Please mention this paper.)

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THE TRIMMER GRAIN SCOURER



SEPARATOR!

Should be in Every El-
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CLEANS & POLISHES

THE GRAIN,
Removing all impurities with-
out breaking or wasting.

Made Especially for this Trade

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KREIDER, CAMPBELL & CO., 1026, 1028 & 1030 Philadelphia, Pa.
Germantown Ave.

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A CALDWELL'S 30,000
CONVEYOR FEET

COLDWELL CONVEYOR

CARRIED IN STOCK.

4 in., 6 in., 9 in., 12 in., and 16 in.

Warranted not to Injure Flour.

Order from cuts shown as wanted.

AVOID THE INFRINGEMENT.

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RICHMOND, INDIANA,

Manufacturers of

IMPROVED MILLING MACHINERY

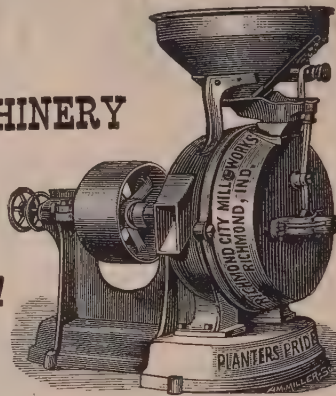
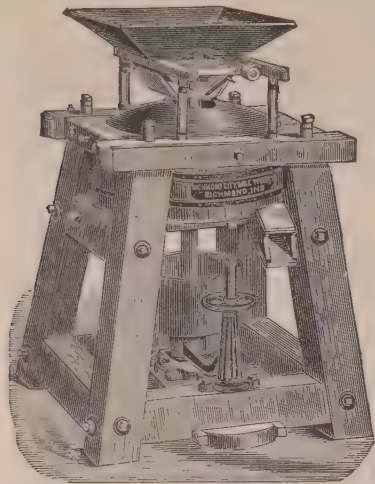
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Of Every Description,

THE BEST MADE!

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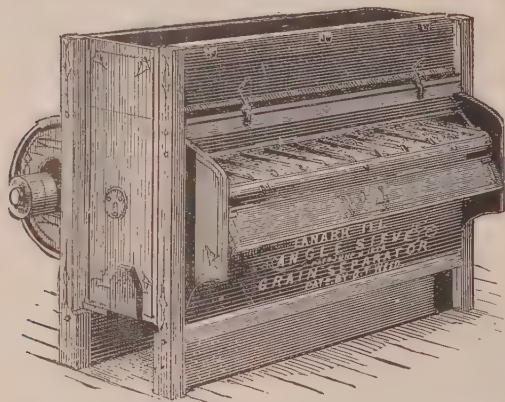
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THE ANGLE SIEVE GRAIN SEPARATOR

(D. T. Weed and H. A. Webber's Celebrated Patent.)

The CHAMPION of the WORLD.

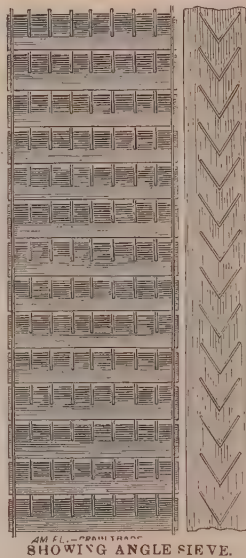


Everybody is astonished to see the work it does. We challenge competition, for general cleaning purposes. We can and will separate oats and wheat raised together, the first time through the Separator, and make it fit for market, and not run any wheat over in the oats. No other Separator can help running wheat over, where the suction or blast is depended on to make the separation, which we claim is not the correct principle of separation. The peculiar construction of the sieve, and the motion of it, do the work. We can take oats out of barley just as well, though not quite so fast. No other Separator attempts to do this. We can also clean buckwheat, flax, rice or any any other small seeds that any other separator will handle.

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Address the Manufacturer,

D. T. WEED, ONE OF THE PATENTEES, Lanark, Carroll Co., Ill.



SHOWING ANGLE SIEVE.

JOHNSON & FIELD,

MANUFACTURERS OF THE

Dustless GRAIN Separator

EMBODIES MORE POINTS OF EXCELLENCE

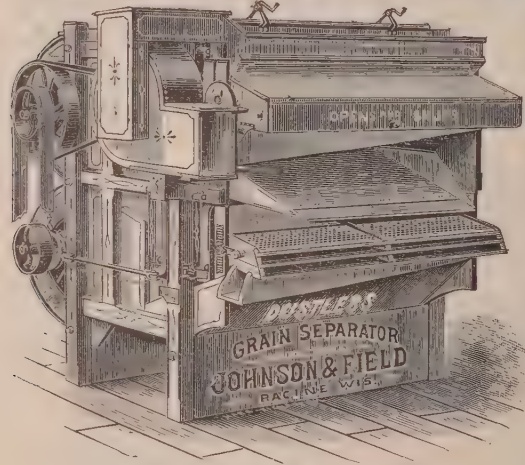
Than any other machine now offered for similar purposes. **Light Running. Large in Capacity. Perfect in Separation, and with great Strength and Durability.**

These machines have no equal. Adopted and Indorsed by many of the largest mills and Elevators in the country.

AS A GRADER IT HAS NO EQUAL.

Made in Different Sizes to Suit Different Requirements. Send for Circular, with Testimonials and Prices. Address

JOHNSON & FIELD, - - RACINE, WIS.



CHAMPION OF THE WORLD!

The Soft Corn of this year has again demonstrated the superiority of the "Champion" in shelling tough corn without breaking the grain. No corn can pass through this sheller without being completely taken from the cob, if the machine is kept in reasonable repair, and run at the proper speed. Address

R. M. McGRATH,

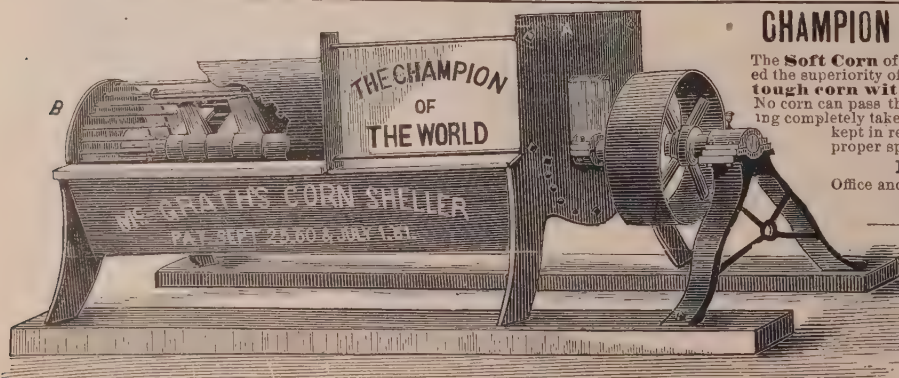
Office and Works, 136 & 138 S. Third St., Lafayette, Ind.

Also Manufacturer of

McGrath's Hornet

AND McGrath's Twin Corn Sheller and Cleaner.

McGrath's Pat. Grain Dump. Also Shafting, Pulleys, Hangers and Warehouse Machinery of every description.



THE California Scourer and Separator COMBINED FOR ELEVATORS.

FOX LAKE, WIS., Jan. 12, 1882.

M. DEAL & Co., Manufacturers California Grain Cleaning Machinery, Bucyrus, Ohio:

Your California Scourer and Separator pleases us. It is first-class. It does its work well. It is the best machine to Scour and Clean Barley we have ever seen. Our engine is 10-horse power and will easily run two machines like it, Fanning Mill and Elevator. We would recommend it for Warehouse purposes ahead of all other machines.

MYERS & BICKELLAUPT.

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The Everlasting Elevator Bucket Co.,



Manufactures three of the best elevator buckets on the market. The "Everlasting" is round faced, no corners to catch; superior carrying and emptying capacity, with patent malleable iron lip. Outwears any bucket in the market. The "Boss" has an oval front and square bottom. Light, strong, and durable; lip can be attached if desired. The "Keystone" is as near perfect as an square cup can be. The corners are rounded, with double bottom, and substantially made. Prices as low as ordinary buckets. Best of testimonials. Sold to mill furnishers generally. Order from your furnishers or of us direct. They pack closely. Elevator Bolts at manufacturers' prices.

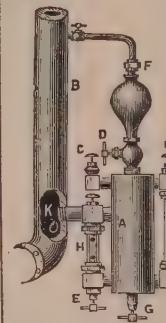
The Everlasting Elevator Bucket Co.,

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DETROIT LUBRICATOR CO'S

PATENT SIGHT FEED

Lubricator Cups



For oiling valves and cylinders of steam engines, by the most perfect method, Through the Steam Pipe. The oil passes in sight drop by drop, into the column of steam, which atomizes it, thus combining a steam lubricant, oiling perfectly every part reached by the steam. Says from 5 to 10 here, it is a year of machinery thus paying for itself several times a year. A cup will be sent to responsible parties on 30 days' trial if desired.

We refer to more than 10,000 firms using the same.

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ELASTIC JOINT

IRON ROOFING.

Manufactured and sold by us in all parts of the country, from Texas to Minnesota for the past EIGHTEEN YEARS. Boxed ready for shipping. ORDERS Promptly Filled. Caldwell & Co., 130 W. Second St. CINCINNATI. Send for Circular.



FIRE, WIND Water Proof Roof Easily Applied. Contraction and Expansion fully provided for. No solder, no nails through the Roofing, no lightning Rod required.

HOWE'S CHALLENGE SAMPLE ENVELOPE



Sent by mail postpaid to any part of the United States on receipt of price as follows:

No. 0...	1 oz	...	\$.65 per 100.
No. 1...	2 to 385 "
No. 2...	4 " 6	...	1.20 "
No. 3...	6 " 9	...	1.75 "
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For full sized illustrations, wholesale prices, terms and agencies, see American Mailer for May, 1884.

HOWE PATTERN AND MFG. CO. 445 Bagz Street, DETROIT, MICH.



"MOORE COUNTY GRIT"

Corn-Mills and Millstones, ALL SIZES.

THE BEST IN THE WORLD FOR TABLE MEAL!

Samples of Meal Sent on Application. NORTH CAROLINA MILLSTONE CO. Chambersburg, Pa.

(Please Mention this Paper.)

BARNARD & LEAS MFG. CO.,

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MANUFACTURERS

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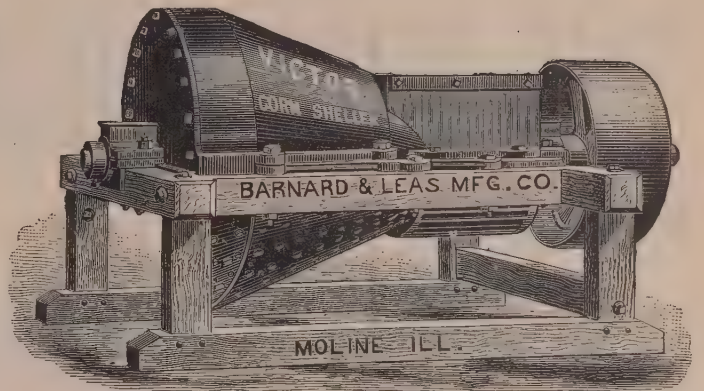
VICTOR CORN SHELLERS,

Dustless Corn Cleaner,

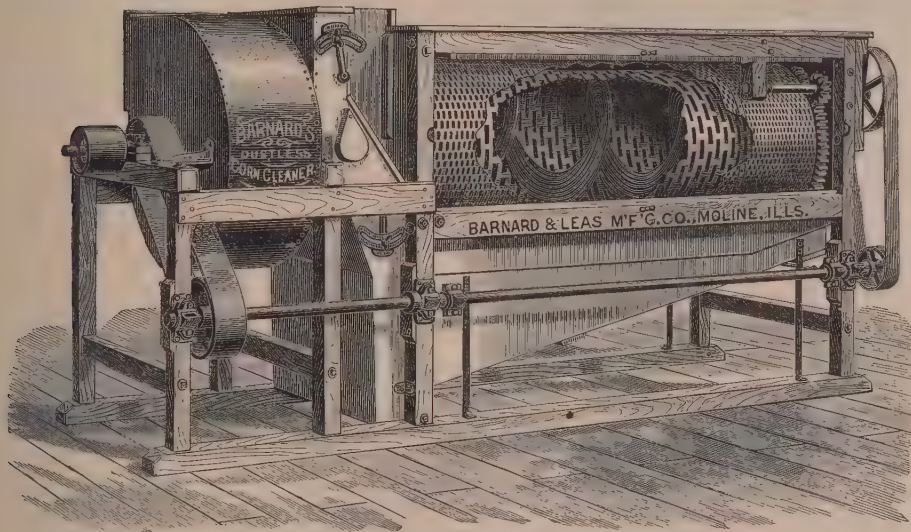
WITH DOUBLE SCREEN AND SHAKER
ATTACHMENT.

DUSTLESS WAREHOUSE SEPARATOR.

Dustless Elevator Separator.



Corn Sheller.



Corn Cleaner.

THE LATEST IMPROVED

—AND—

VERY BEST!

MACHINES

—FOR—

WAREHOUSE PURPOSES

On Earth.

—MANUFACTURERS AND DEALERS IN—

GRAIN ELEVATOR SUPPLIES!

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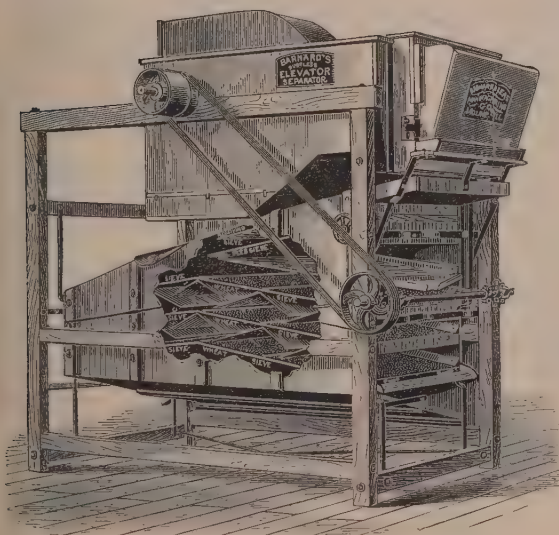
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OF ALL KINDS.

*Iron Elevator Boots, Wagon Dumps, Swivel and
Crane Spouts for head of Elevators
and Hoppers.*

Shafting, Pulleys, Hangers, Belting of all kinds, Link Chain
Belt, Sprocket Wheels, Wire Rope, Sheaves,
Elevator Buckets, Bolts.

Send for Circulars.



Improved Elevator Separator.



ESTABLISHED 1855.

PAID UP CAPITAL, \$80,000.00.

THIRTY YEARS' EXPERIENCE

Has enabled us to produce an **ENGINE** that is fully abreast of the times. We will cheerfully furnish Estimates for Complete Outfits of **Elevator Machinery**, including **SHELLERS, CLEANERS, and all PULLEYS, SHAFTHING, etc.**, to operate the same. We make

HORSE POWERS, AND ALSO ENGINES AND BOILERS!

—CORRESPONDENCE SOLICITED.—

THE FROST MFG. COMPANY, - GALESBURG, ILL.

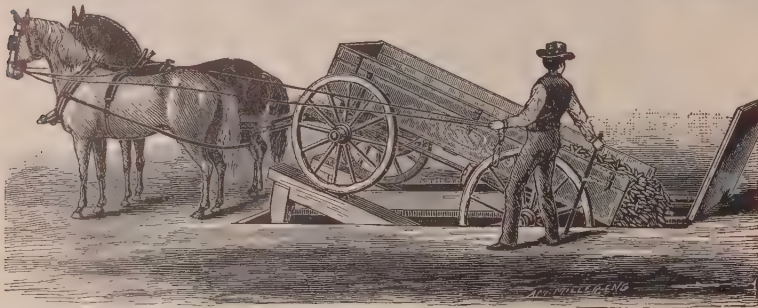
THE BODINE ROOFING

THE BEST IN THE WORLD

—FOR ROOFING OR SHEATHING—

Mills, Elevators, Warehouses, Engine and Boiler Rooms, Cooper Shops, Barns, Offices, or Dwellings. Is **Light, Durable**, practically Fire-proof, easily put on, and cheap. Samples and Prices free.

The Bodine Roofing Co., - - - Mansfield, Ohio.



The above cut is a fair representation of the Rail Dump in common use, on which we are collecting a royalty for past use, and licensing parties to continue to use and also put in New Dumps. Our patents on Rail Dumps fully cover this class of Dumps. Any one using Rail Dumps can readily decide by comparing his Dump with this cut, whether he infringes or not. We also control patents that cover Platform Dumps. Our prices are reasonable in settlements for past infringements, and for licenses to continue to use the Dumps. Prices given on application. See notice below.

NOTICE.

To Parties Using Grain Dumps.

Notice is hereby given that we have been retained to prosecute infringers of the following Letters Patent on Grain Dumps:

One granted to Noah Swickard, Oct. 13, 1868, No. 88,005. Reissued Dec. 20, 1870, No. 4,212, for Improvement in Wagon and Car Unloading Apparatus.

One granted to Samuel C. Kenaga, Oct. 20, 1868, No. 83,288, for Improved Dumping Platform.

One granted to Benjamin Walton, Nov. 31, 1869, No. 97,252, for Improved Dumping Machine, and

One granted to Wm. M. Hall, Sept. 6, 1870, No. 107,040, for improvement in Grain Dumps, and all persons or parties manufacturing or using Grain Dumps which infringe on any of the above described Patents must make settlement for all past infringements, and take license in accordance with the usual terms, if they desire to continue to manufacture or use the same, or legal steps will be taken to enforce said Patents against all infringers.

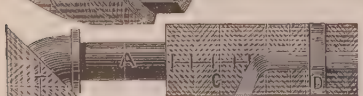
Applications for licenses for using said patented improvements, and for settlement for past infringements should be addressed to

J. M. HARPER, New Opera House Building, Peoria, Ill.

BURNET & BURNET,

Complainant's Counsel, Cincinnati, Ohio.

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For Boilers, Steam, Gas and Water Pipes,

Prevents Condensation of Steam and Radiation of Heat.

Awarded the **Silver Medal** at the late National Exposition of Railway Appliances, being the highest and only prize given.

SHIELDS & BROWN,
78 and 80 Lake St., CHICAGO.

Send for Illustrated Descriptive Circular and name this paper.

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FEED MILLS. The cheapest and best mills in the world. Prices \$30 and upwards, subject to cash discount. Send for circulars to **A. W. STEVENS & SON,** Auburn, N. Y. Mention this paper.



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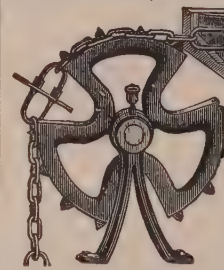
—For Running—

Elevators, Grinding Mills, Corn Shellers, etc.

Send for Catalogue, stating what you want.

RICE, WHITACRE & CO.
Chicago, Ill.

SIMPLE, CHEAP, STRONG AND DURABLE.



IS INDISPENSABLE

—FOR—

Mills, Elevators, Warehouses, Breweries, Malt Houses, Distilleries, Glucose Works, Starch Factories, Saw Mills, Furniture Factories, Brick Yards, Coal Mines, Foundries, Etc., Etc.



HARRISON CONVEYOR.

Patented June 13, 1882.

IT DOES
CLEAN WORK!

—AND ALLOWS NO—

MIXING OF GRAIN!

MANUFACTURED BY THE

HARRISON CONVEYOR CO.,

16 West Lake Street,

CHICAGO, - - ILL.

ALL WROUGHT IRON!

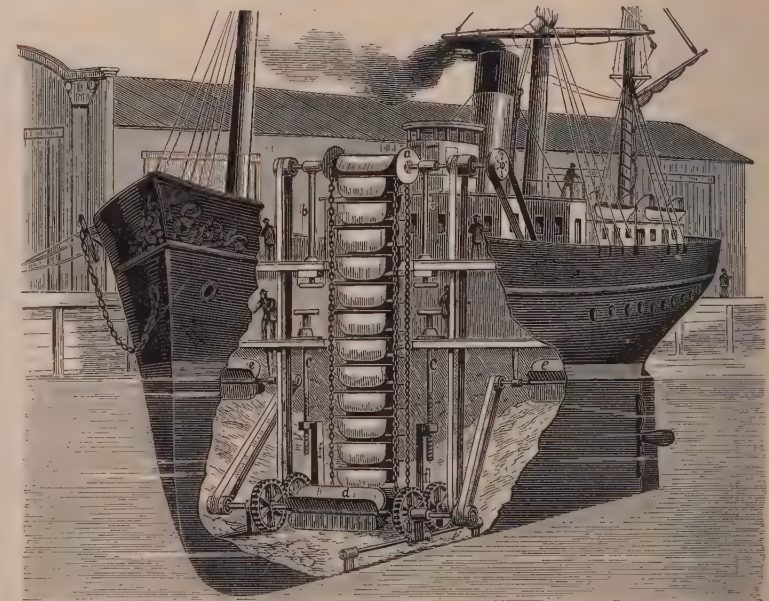
IT CARRIES

Grain,
Seeds,
Ear Corn,
Wet or Dry Malt,
Coal,
Sand,
Saw Dust,
Tan Bark,
Stone,
Cinders,
Clay,
Bricks,
Boxes,
Blocks,
Packages,
Etc., Etc.

SEND FOR CIRCULAR AND PRICE LIST.

AMY BARDEEN'S

IMPROVED GRAIN ELEVATOR!



FOR SALE

In whole for United States and Canada, or to suit Purchasers.

We claim for this Elevator a great saving of manual labor, often preventing loss of life by shoveling in the hot, dusty holds of grain vessels. Also that the grain can be removed much cheaper, as shovels may be journaled to any part of the vessel.


For Particulars address

A. BARDEEN, - - - - Blackstone, Massachusetts.


SUBSCRIBE FOR THE AMERICAN ELEVATOR AND GRAIN TRADE

\$1 per Year. Address **MITCHELL BROS. CO., Chicago.**

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 June 30 1883
 To whom it may concern
 This is to certify that we have
 in use, in our Elevator, some 10 or 12
 Skinner & Wood's Engines & Boilers. They
 also in use in many more of other makes.
 And we unhesitatingly say that economy
 in fuel cost, in economy of fuel and
 in durability, that we give them man-
 ufactured by Skinner & Wood the highest
 rank. These of any other make.
 J. Christ, L. H. H. L. Co.



Skinner & Wood
 Erie Pa.
 Dear Sirs We have purchased
 and have in use twenty five
 to thirty of your Boilers and
 Engines and we take pleasure
 in recommending them as
 being the most durable and
 economical Engines in the
 market. Our fires for repairs
 are very small. We have
 not different sources of
 engines in use and ensure
 the "Skinner & Wood" the
 best of all.
 W. D. Angell

N. H. WARREN & CO.,
Commission Merchants,
 ROOM 6 102 WASHINGTON STREET,
 Chicago, Z. O. Dec. 83
 Skinner & Wood,
 Erie Penn.
 Messrs. your
 letter of the 14th asking as to the
 satisfaction given by the engines
 and Boilers you have furnished us
 is received. Our answer will say
 the first Engine purchased of you
 five years ago, and has been
 followed by others as required
 in our grain elevators. They all
 work well and need not have
 had required repairs so far as we
 remember and we feel confident
 that they will give us perfect
 satisfaction in future as they have
 in the past.
 Yours truly, N. H. Warren & Co.

Public Grain Elevators.
 To whom it may concern
 On the next crop we shall be
 running 45 Engines in Elevators,
 37 of them are the Skinner & Wood
 Erie Pa. Some of them have been
 running 3 years 12 of them but
 in that number. The above will
 show our opinion of them.
 J. S. Culbert, Mgr.
 Port Elev Co.

H. W. PRATT & CO.
 Grain Dealers.
 Fairbault, Minn. June 28 1883
 Messrs Skinner & Wood
 Erie Penn.
 We cheerfully
 comply with your request for our
 opinion of the merits of the
 "Skinner & Wood" Engine. We have been
 using them for the past seven
 years & have bought no other
 since we ordered the above.
 For ease of management,
 less drivers of motion, economy
 of fuel and attention, they surpass
 any Engine we are acquainted
 with. We are pleased to hear
 our recent orders met by filled
 as promptly as possible.
 Yours very truly
 H. W. Pratt & Co.

THE MINNESOTA & DAKOTA
ELEVATOR COMPANY.
 Minneapolis, Minn. May 14 1883
 To whom it may concern
 This is to say that this company
 purchased of Messrs Skinner & Wood, Erie
 Penn. last year, 45 of their manufacture
 of steam Engines, for use in Elevators
 and receiving points along the line of
 the St. Paul, Minneapolis & Northern Pacific Railway.
 These engines have given good service
 and have proved very satisfactory.
 Respectfully
 The Minnesota & Dakota Elevator Co.

Hodges & Hyde,
 May 15th 1883
 Messrs Skinner & Wood
 Erie Pa.
 Having used quite a
 number of your Engines for running
 Elevators for the past six years
 we take pleasure in saying that
 we find them very durable
 economical easy to manage
 not liable to get out of order and
 perfectly safe.
 Yours truly
 Hodges & Hyde

L. C. BARNETT,
 BUILDER OF
Round Grain Elevators.
 Messrs Skinner & Wood
 Erie Pa.
 Gentlemen I am happy to say that four years experience
 with your Engines & Boilers has been very satisfactory to me.
 I know of none of them having been for that length of time
 with one dollar's expense for repairs.
 Very truly yours
 L. C. Barnett
 Our engines are running some 25 or 30
 of these Round Elevators
 Yours

SKINNER & WOOD,

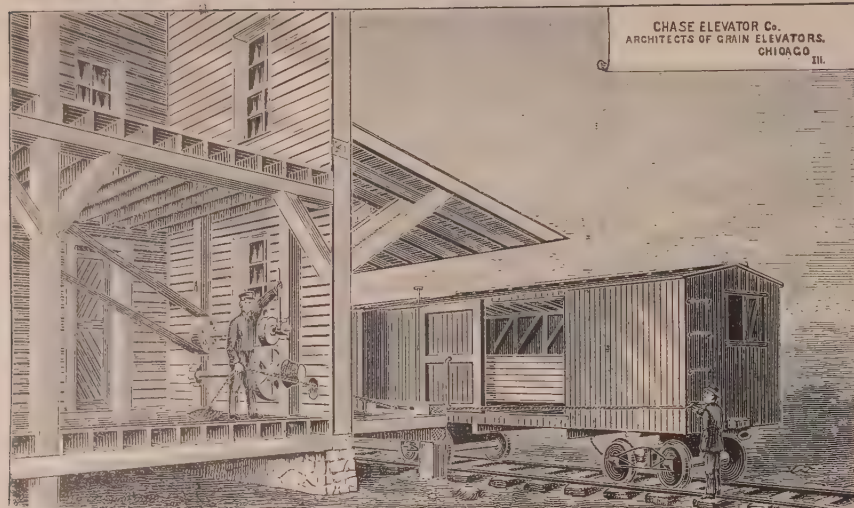
—MANUFACTURERS OF—

PORTABLE AND STATIONARY ENGINES, BOILERS

Governors, Etc.

ERIE, PENNSYLVANIA.

CHASE'S STEAM CAPSTAN FOR MOVING CARS!



It is composed of a cast iron spool on a shaft, driven by friction pulleys, and the power is attached and detached by an excentric box and lever. It can move from one to ten cars at once, and they can be moved three inches per minute or three hundred feet per minute, at the will of the operator. The strain is applied to the rope very gradually, and there is no danger of breaking the rope or the machinery.

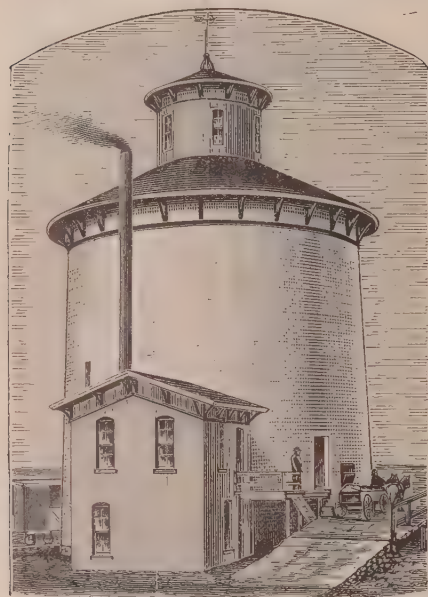
This is the only kind of Steam Capstan that is attended with no danger to the operator. It can be built for \$120, including 150 feet of rope. For \$20 we will furnish working drawings, specifications and building directions; also bills of materials, with prices attached.

Do not try to build it from this picture, or it will cost you more than it ought to. You will save money and secure successful operation by securing plans.

Chase Elevator Co.,

ARCHITECTS OF GRAIN ELEVATORS,
CHICAGO, : : : ILLINOIS.

CIRCULAR GRAIN ELEVATORS.



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36 Washington Ave. S.
Room 10.
MINNEAPOLIS, - MINN.,
BUILDER

For all Territory West of the Mississippi.

More than FIFTY in Successful Operation in the Northwest.

We can refer intending Builders to any and all of them.

The Most Storage for the Least Money,
And the Handiest to Operate.

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Architect & Grain Elevator Builder & Contractor

417 OLIVE STREET, ST. LOUIS, MO.

Plans, Specifications and Estimates Furnished on Application. Correspondence Solicited.

E. B. FREEMAN,
ARCHITECT AND PRACTICAL BUILDER

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Pile Driving and Trestle Work,

Bridge, Elevator, Warehouse and Farm Buildings Plans Furnished

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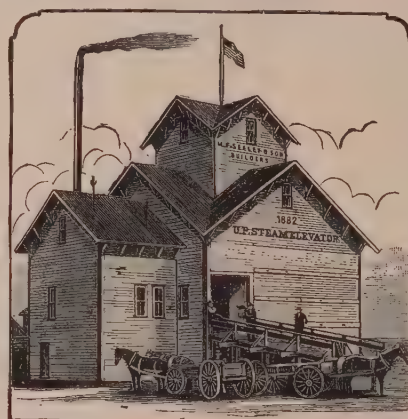
Room 24 Davidson Block,
Corner 4th Avenue and Jackson St., - ST. PAUL, MINN.

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We build a "SEELEY" ELEVATOR that stands at the head of Elevators as a self-binder stands at the head of reapers. We furnish

Plans, Specifications and Estimates

Also furnish all kinds of

MACHINERY.

Engines, Cleaners, Corn Shellers, Belts and Buckets, Etc., Etc.

With our experience we can save you on these items more than cost of Plans. Correspond with us and save costly mistakes.

Kerr Murray Mfg. Co.,

Ft. Wayne, Ind.

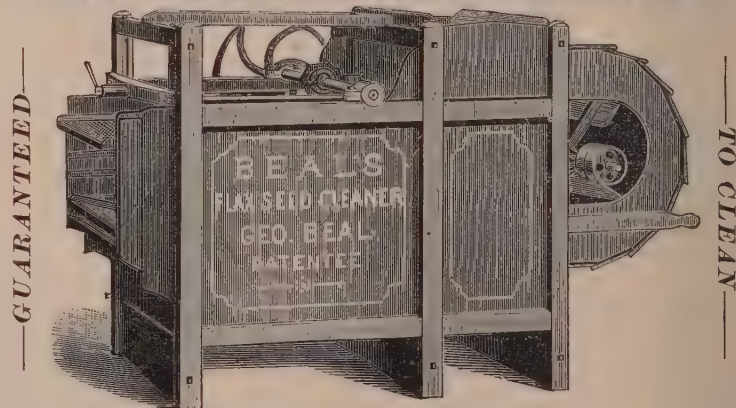
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ESTIMATES FURNISHED ON APPLICATION.

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FLAX SEED BETTER, AND WHEAT, CLOVER, AND TIMOTHY SEED AS WELL,

As any Cleaner in the Market.

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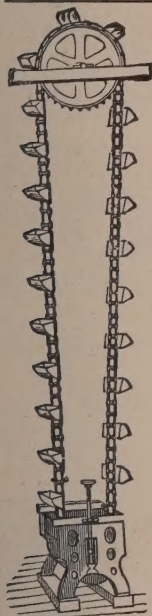
Horizontal Belt Conveyors, Tripping Machines, "Boots and Heads," "Legs" for Unloading Barges, Register Valves, Bin Bottom Valves, and Shipping Spouts

Are of the most efficient style. We are also prepared to furnish

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Made under heavy hydrostatic pressure. Samples of our work may be seen at the

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TRANSMITTING POWER,

ESPECIALLY ADAPTED for Elevators, Conveyors, Carriers and Driving Belts for Use in Mills, Elevators, Breweries, Malt Houses, etc., etc.

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CHAS. KAESTNER & CO.,

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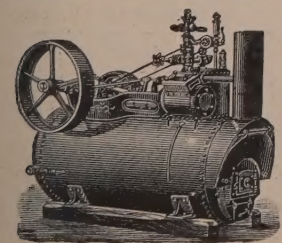
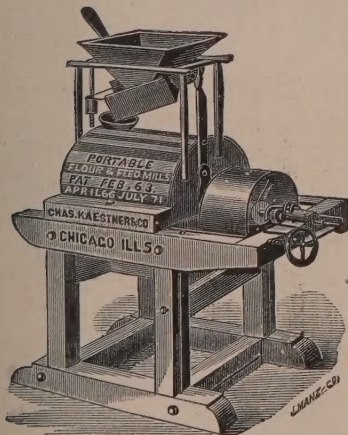
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Over 4,500 of our Mills in Use.
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Parties erecting Elevators will consult their own interests by sending for our illustrated Catalogue and references.

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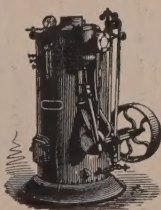
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UPRIGHT ENGINES: 3 Horse, 4½ Horse, 6½ Horse and 8½ Horse Power. Safe, Simple and Durable. Over 3,000 in successful operation.

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Eastern Office: 110 Liberty St., New York.



A GREAT SAVING IN THE RUNNING OF GRAIN ELEVATORS! THE LOTZ PATENT GRAIN SHOVELING MACHINE, FOR UNLOADING CARS.

PAT. NOVEMBER 23, 1880, AND DECEMBER 14, 1880.

This machine works automatic. The hoist rope spool of each machine is driven from a line shafting by paper friction wheels, and all the mechanical movements in the machine are such that they will not wear, nor get out of order. A GREAT SAVING IN REPAIRS OF SCOOPS, in the WEARING OF ROPES, in LUBRICATING MATERIAL, and in REPAIRS ON MACHINE. The resistance on taking the scoop back into the car is much less than with other automatic machines. The length of pull of hoist rope can be instantly adjusted. The more economical operation of this machine as compared with others will pay its first cost in five years.

Eleven double machines of above construction have been set up and are in practical operation in Rock Island Elevator A, near Twelfth Street Bridge, Chicago, Ill.

MR. WM. H. LOTZ, CHICAGO: Office of FLINT, ODELL & CO., 151 Monroe St., CHICAGO, May 4, 1883.
DEAR SIR—We have been using your Patent Shovel Machines in Rock Island Elevator A for several months, and are well satisfied with them. We estimate a saving of 50 per cent. on shovels, 75 per cent. on rope, and 60 per cent. on oil over all the Shovels previously used by us. Yours truly, FLINT, ODELL & CO.

For further information address

HOWARD IRON WORKS, Buffalo, N. Y., or WM. H. LOTZ, Mechanical Engineer
Sole Mfrs for the United States. Metropolitan Block, Chicago.

HOWARD IRON WORKS, BUFFALO, N. Y.

—MANUFACTURERS OF—

MACHINERY FOR GRAIN ELEVATORS.

They Have Furnished the Machinery For

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MUNGER, WHEELER & CO. IOWA ELEVATOR.....	" "
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WARASH ELEVATOR.....	" "
CHICAGO & WESTERN INDIANA R. Y. CO. ELEVATOR.....	" "
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THE IMPROVED CUMMER AUTOMATIC ENGINE.

We build FIVE Classes of Engines.

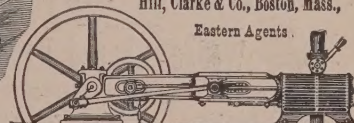
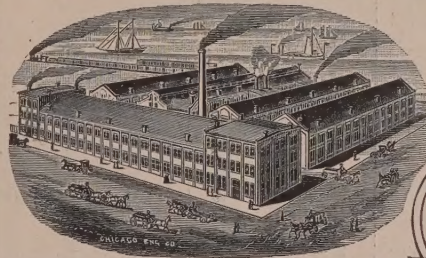
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REYNOLDS-CORLISS ENGINE!

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OVER 250 OF THESE ENGINES ARE NOW IN USE, and references can be given. These engines have developed in expert trial and every day work THE HIGHEST ECONOMY KNOWN IN STEAM ENGINEERING!

They will save in fuel 33 to 60 per cent. over any ordinary engine.

We also manufacture Reynolds' Patent AIR PUMP and CONDENSER, which can be used with

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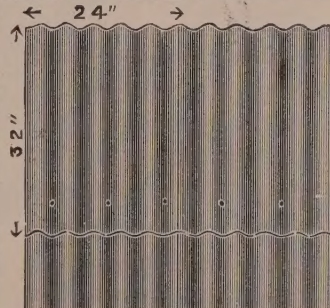
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CORRUGATED IRON

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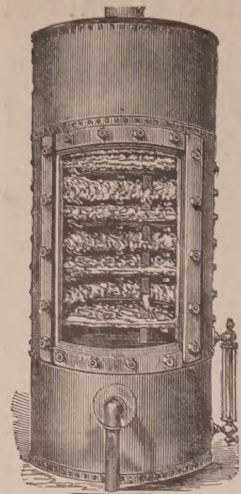
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THOROUGHLY TESTED. OVER 3,000 OF THEM IN DAILY USE!

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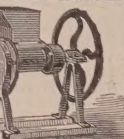
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3 H. P. \$275.
5 H. P. 300.
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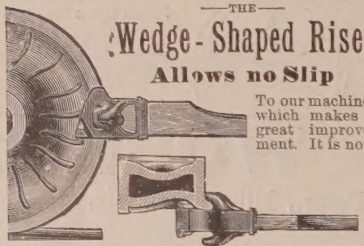
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6 H. P. \$ 600
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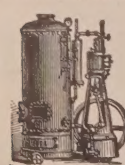
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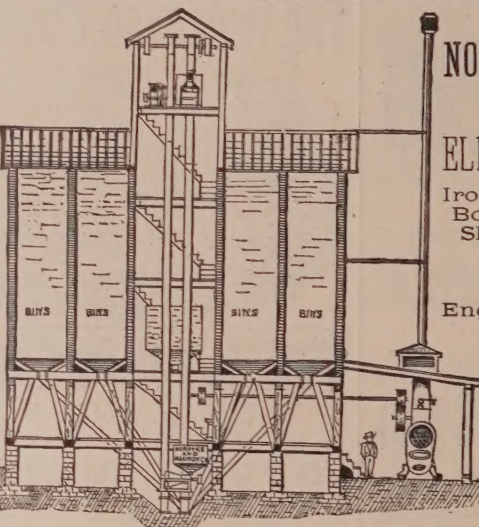
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Patentee and Manufacturer of

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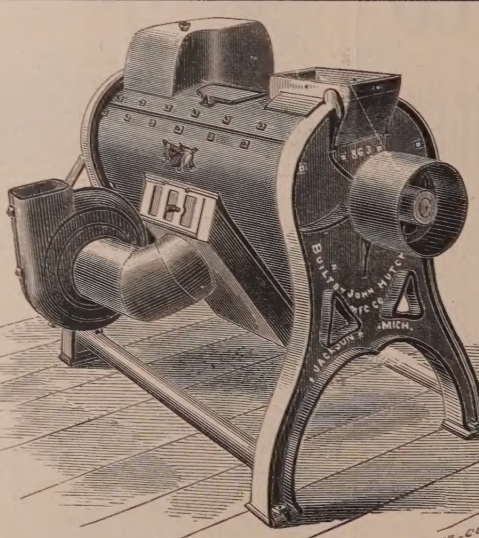
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ELEVATOR MACHINERY,

Iron and Wood Elevator Boots, Elevator Cups, Shellers, Portable Mills, Grain Cleaners, Grain Dumps and Scales, Engines, Boilers, Shafting, Pulleys and Belting.

Plans made to order, showing handiest and best arrangements for handling
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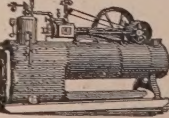
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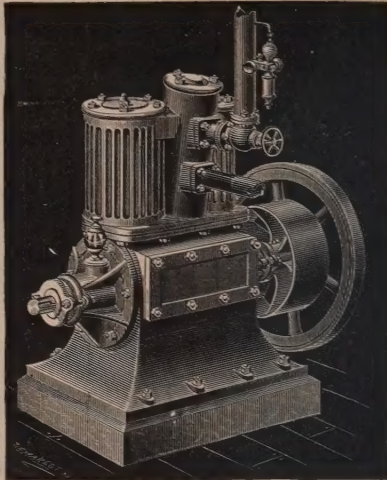
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The best evidence of its peculiar merit is the fact that our Shipments Average Two Engines per Day! Over 600 Engines and 16,000 H. P. now in Operation!

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RUBBER "TEST" HOSE, made of Vulcanized Para Rubber and Carbolized Duck; Cotton "CABLE" HOSE, Circular, Woven, Seamless, Antiseptic, for the use of Steam and Hand Fire Engines, Force Pumps, Mills, Factories, Steamers, and Brewers' use.



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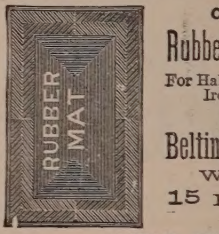
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Large Wheels made on Cast-Iron Centre if desired.

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Elastic Rubber Back Square Packing.

BEST IN THE WORLD for Packing the Piston Rods and Valve Stems of Steam Engines and Pumps.



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Rubber Mats and Matting,

For Halls, Flooring, Stone and Iron Stairways, etc.

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The only mills that will grind RAW BONES green or dry. For the Poultryman, Farmer, Gardener and Bone Dust Manufacturer. For Hand and Power. Send for circulars and testimonials. Also manufacturers of Horizontal Steam Engines.

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PERFORATED SHEET METALS



For all kinds of

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THE HARRINGTON & KING PERFORATING CO.,

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CORRUGATED,
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BEAD.

MOSER & THOMPSON,
—MANUFACTURERS OF—
IRON ROOFING
—AND—
SIDING!

Corrugated Iron Siding for Grain Elevators a Specialty.

28-32 River St., Cleveland, O.

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—OF—
SHEET IRON

ROOFING

In the United States.

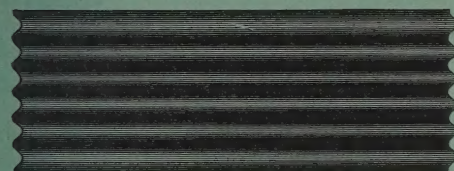
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In use in every State and Terri-
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Send for Descriptive Cir-
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Sheet Iron Roofing.



Corrugated Iron Siding and Roofing.



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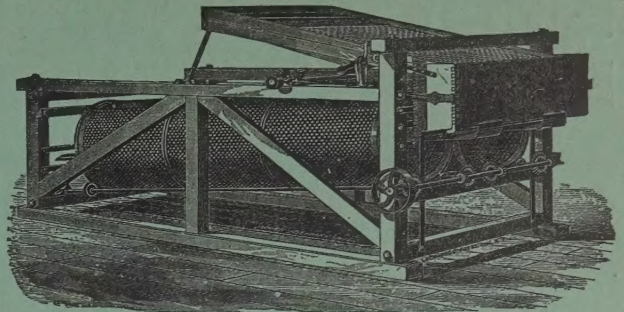
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All Orders sent to FAVORITE STOVE WORKS CO. for PORTER IRON ROOF-
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—MANUFACTURERS OF—



(DIFFERENT SIZES BUILT.)

Kurth's Patent Improved Cockle Separator.

Combines Large Capacity with Good Quality of Work. Especially Adapted for

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Also Built in Combination with Richardson's

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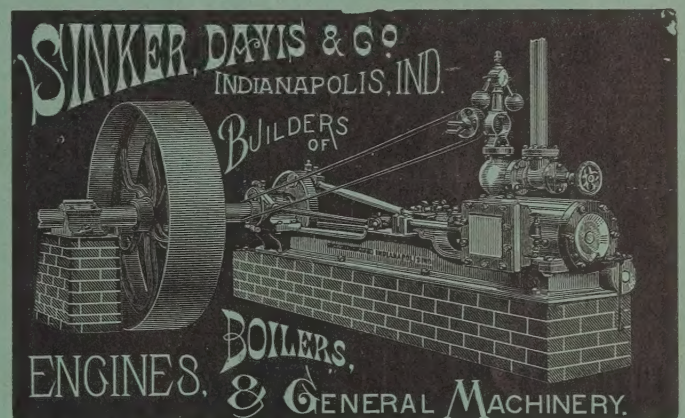
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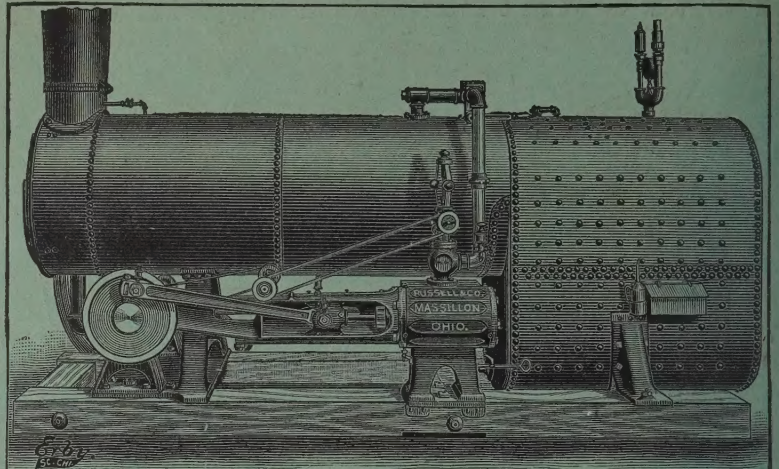
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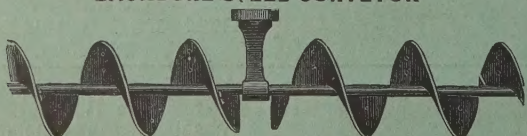
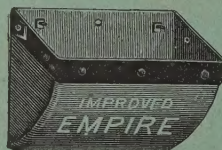
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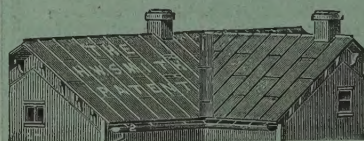
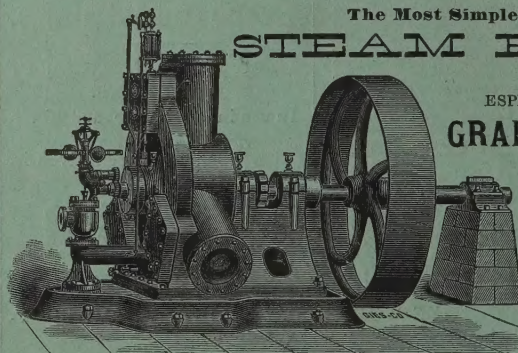
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